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NEW YORK AND CHICAGO.

VOL. XLI.—NO. 2.  
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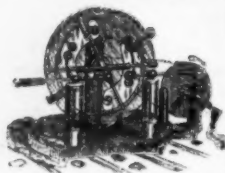
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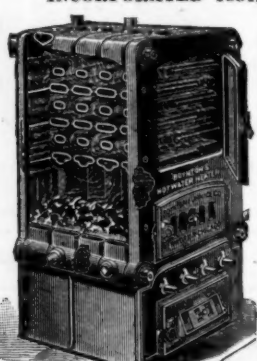


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THE subject of a training school for the new method has already come before the board of education; it will be remembered that it has been frequently suggested in THE JOURNAL. It is a need that grows more and more apparent every day. The ordinary teacher (1) cannot teach the new subjects without special preparation; (2) there is growing out of this, an opposition to the new methods by many teachers and principals.

The probability is that, in ten years, all the leading normal schools of the country will be prepared to teach the new methods. In other words, the practice of teaching is to become specialized, like the practice of medicine, for example. Once (why say once, it is so now), the best teacher was one fresh from college, who had studied Latin and Greek, things the pupils were not to study. Now it is felt the teacher must know the applications of knowledge to the processes of life. "Teach me to live better, higher, nobler, and in a more satisfactory way," is recognized as the cry of the children now.

What the great metropolitan city does in this direction will attract widespread attention. It must be noticed that this is quite different from establishing a manual training school, which has been done in many cities. The plan proposed is to color, as it were, the whole course of study, from the top to the bottom, with manual training.

THE annual conventions have some indications of progress in the selection of subjects for discussion. These should pertain to the teacher's occupation, and always be such as possess a living interest. In the Southern states the subjects cover a wide field; they remind us of our state of thought thirty or forty years ago. In the Eastern states the selection indicates a further advancement in the conception of a profession of education—though some of the Western states are not far behind.

No subject, it would seem, would be more appropriate for a convention to assign to a committee to work over than this: "What are the things a child of six years of age should know; and what for each of the eight school years following the two kindergarten years?"

Of course there are teachers who would answer in one breath, "Why, to read in the First Reader, write little sentences, spell all the words of his reading lesson, and say the multiplication table." There was a time when this would have been considered a very good answer, but that time has passed.

THE new president of the board of education of this city has a large enough field of labor, for the school system of this city has left its medieval moorings, and will never return to them. It will cost the gentlemen composing the board nothing, if we point out some things they might do that would be of signal benefit to the children of this city:

1. There should be at least five high schools started to provide educational facilities for those of the 3,000 graduates of the grammar schools who will not enter the Normal or City colleges. Of the 1,500 girls who were graduated, 614 go to the Normal College; of the 1,500 boys, 640 go to the City College, leaving 1,746 to wander about like sheep without a shepherd. True, they did not get the per cent. fixed by the colleges, but if they had the colleges would not have held them.

2. There should be a training school established to instruct teachers in the methods required by the new course of study. This could be held in some of the high schools suggested. The high schools should have one, two, and three years' courses; on finishing one of these courses the pupil should have a handsome certificate given him by the board of education. It is certainly pitiful to be obliged to listen to a parent who asks, "What shall I do with my daughter who graduated from grammar school — ? She did not get into the Normal College, and I want her to have more instruction." Gentlemen of the board of education, please answer these points. There are other needs, but these two are the most important at present.

THE tendency of civilization is evidently to specialize, and it must follow that one of the important functions of the schools—the right arm of civilization, is to furnish opportunities for preparation for the different activities that exist. We have often stated our belief that in a quarter of a century there will be schools for all kinds of labor—for carpentry, masonry, cabinet work, printing, engineering, cooking, domestic service, etc.

At the present time we have schools of drawing and painting, typewriting, shorthand, dress cutting, teaching, and many others. When normal schools were first opened, they met with opposition and derision; there is probably \$500,000 spent annually in their support, and they are extremely popular; they have vindicated the wisdom of their founders. The schools founded by Col. Auchmuty, in this city in masonry, decorative painting, etc., are exceedingly successful. There could be a dozen different kinds of schools established at once, that would be successful—typesetting needs one, and it would pay its manager well. There should be one for loco-

tive engineers with a railroad to train them on. There has been an excellent school for mining engineers in Scotland, for many years.

Nor do we believe the difficulties in the way of managing our political affairs can be remedied except by education, by special schools. Those who wish to enter the civil service should be educated for it. As it is, we have the spectacle in this country of men noted for their ignorance sitting in places of power; they are found even on boards of education! Nor is this such an impractical scheme as one might suppose. In Germany local or municipal administration is a profession like any other. It exacts of its members a special training; they are in the ranks, and work their way up, according to merit, experience, and examination. Here is a field for education to enter.

THE bureau of statistics of labor, in Massachusetts, says that the influence of the employment of women and minors, though perhaps tending to decrease wages, also tends to shorten daily working time. After the passage of the law limiting the hours of work to ten, the manufacturers in the textile industries (in which women and children furnish the larger number of workers) were obliged to conform the hours for all persons to those fixed for women and children; so that ten hours is the nominal working day in eighty-two per cent. of the manufacturing and mechanical industries of the state.

The Rhode Island bureau has just completed an investigation into the condition of working women in that state. The largest number received wages ranging between \$6 and \$7 a week, and the next largest from \$7 to \$8.

These are interesting facts, for the question is often asked, "What are the children going to do with the education they get at the common schools?" They will know what to do with these extra two hours, a very important thing, we think. Then, too, the wages paid women is double what once was paid in the cotton mills; what they shall do with the money they get is an important question. We have been told that a very large number of the native-born workers are members of the Chautauqua circle. It is a pleasure to write such a statement.

IT is agreed on all sides that children should be taught to be polite. This the "average teacher" assents to when the subject of manners presents itself. But how about the teacher's manners? That is a point to be considered. George Washington, when asked why he touched his hat to his negro servant, replied, "I cannot allow a servant to outdo me in courtesy." It is a recognized rule of that merely conventional politeness that governs the behavior of all well-bred people—however superficial—that the more refined courtesy is to be expected from a superior toward an inferior, rather than the reverse. How much more should this feeling be prompted by that spirit of Christian forbearance that underlies the ethical side of good manners. A teacher occupying a higher position and having greater opportunities, must feel called upon to excel in politeness toward pupils. No one agency can do more toward evoking that spirit in them. It is not sufficient for him to feel polite, he must act polite.

IT is plain that a movement is in progress toward establishing county training schools. We have called attention to the action in Essex Co., N. J., and now we hear of another in Hillsborough Co., Fla. The "making up of mind" that Page speaks of for the school-room, is extending to the teacher! At last!!



## A TEACHERS' CHAUTAUQUA NEEDED.

During the past week the annual re-opening of the summer work at Chautauqua occurred—it is the seventeenth session. For two months the cottages by Chautauqua lake will be crowded with earnest students. We have just examined the program of study. The teachers and lecturers are in many cases men of distinguished ability. History, religion, music, cookery, literature, journalism, philosophy, philology, political economy, ethics, psychology, education, science, language, drawing, painting, gymnastics, and elocution, are a few of the subjects proposed.

This is a summer school with a real purpose. It is an expression of the desire for self-improvement that pervades the entire country. Among those who come there will be many whose heads are beginning to bear signs of age; farmers who have laid by a small competence, and the farmers' wives too; prosperous mechanics from the smaller towns; young men and women who daily labor in some walk in life—it is a People's University. All are animated with an earnest desire to make more of themselves, to ascend in the scale of civilization, to taste the fruits of the tree of knowledge.

Why, it will be asked, do not the teachers have a Chautauqua, or rather why have they not had one for fifty years? While it does not look well to find fault in every number of THE JOURNAL, the appalling inertia of our educators must be mentioned. Nor can any good reason be given for its existence save this—a wrong and unnatural method of teaching revenges itself by reacting on the teacher himself, so that he does not want to do what he is urging the pupils to do—rise to higher levels of knowledge and culture. There should be an educational Chautauqua—the National Association is all well enough, but it is short, lasting two days, and in a city. It should be in the country, and should be a school—stimulating, restful, helpful, and broadening. There are the beginnings of a Chautauqua at Martha's Vineyard. We like the atmosphere, the genial spirit of the men and women there, and believe the school has great possibilities.

WHAT can the teachers of the high schools do to hold the boys and induce them to pursue a course of higher studies? This question has been pressed upon the teachers of the country year after year; and every year there are fewer boys in the high school in proportion to the size of the classes in the school below it. This is a very serious question, and one the conventions should discuss, leaving the "mound builders" alone for awhile. In Illinois a convention discussed it, and one speaker proposed the cultivation of athletics as a remedy!

Without looking into the causes at this movement (it must be admitted there are causes for a movement so profound as this), it is worth while to ask if the teachers ought not to do something for those boys who will not go into the high school? How many boys are there who finish the studies of the advanced school (wrongly called grammar school)? In this city it is annually one per cent. of the entire enrollment. The total enrollment in the United States is ten million; one per cent. of this is 100,000. Suppose it to be one half of this or one quarter even, and we have 25,000 boys who ought to be gathered into associations to make further intellectual progress.

It is of no use to say they should have staid in the schools; the fact is they are out. How many does the "Chautauqua" movement gather up? This is uncertain, but it has helped a large number.

Now we suggest to the teachers to form associations to benefit these graduates of the advanced school; mark out a course of study, gather them into night schools; have annual conventions of them in the country and distribute certificates, and also have a big meeting in the state.

These boys ought not to be allowed to slip out of sight so easily. We are reminded of a teacher in a Sunday-school. The superintendent had worked hard to get in the uncared for boys of a neighborhood, and had told his teachers to hold on to them

with "hooks of steel." This teacher's class began to melt away; the superintendent was terribly worried, and as he saw the five of one Sunday become three the next, he remarked, "Mr. G, the two Judson boys are gone to-day." "Yes," returned Mr. G, "they said last Sunday they would not come any more." "What did you say to them?" "Oh, I said, 'All right.'"

It seems to us that the 25,000 boys who annually leave our advanced schools, go with an "all right," when they should be put on the roll of an association that would look very sharply after them.

SOME time since a village in New York wanted a superintendent at \$1,200 salary. After hearing of the style of man wanted, the writer replied: "Such a man as you describe is not out of employment; such men are eagerly sought for."

And the question arose why are there not more such men and women? And the answer is that "Most men are niggardly towards themselves." They spend nothing on themselves. They do on clothes, jewelry, or in traveling, or in living; but not on those things that reach the life and soul.

Every person who lives by the force that is in him, must replenish that force, just as a lamp must be re-filled. Now in the teacher's case, the first thing is a knowledge of the child; the second, the instruction. To know the child educationally, he must study education in a large way.

We may look at the teacher wholly as an instructor—or we may look at him as a producer of power. Probably the majority look at themselves in the former way, but the public look at them in another way.

Some years ago at a house in the country on a Christmas eve, a large party was assembling. Soon was heard the inquiry, "Has Rachel come?" This question was repeated in a variety of forms, and one soon became interested to meet this girl who made so great a part of the thoughts of a company that it could not enjoy itself in her absence. She arrived and loud welcomes were heard, and a look of satisfaction was seen on every face. To this girl, of about twenty years of age, with calm, steady eyes, and a self-possessed manner, the whole company seemed to bow.

Soon she went to the organ and a few voices sang some pieces; then others sang and played. By her art, everyone that could sing or play was brought forward. Then some games were introduced by her, and so through the evening she led the party.

She was the daughter of a farmer who had educated herself in music, drawing, and painting, who taught in the Sunday-school, played on the organ at church, and who had organized reading clubs, and who had even written for the county papers. She was a force; what she knew was like storm, or electricity, or powder, a force that acted on others. She afterwards went to a normal school, graduated, and is now teaching a normal school. Teaching was evidently her forte.

At the time referred to she possessed but little more knowledge than the rest in the company, but she used its possession as a force. Her mode of using knowledge was the correct one, and her example should be followed by the teacher. The teacher who is a force is generally respected, well-paid, and sought for.

THERE are several ways in which the teacher can impress on the pupil the value of a good character, but best of all is the teacher's own example. This is a most potent influence always, and especially so with youth. Precept is well, example is better. The mind needs an object, an illustration of the beauty of right living. The teacher who desires to lead pupils up to conscientious life and action, must himself live conscientiously, and guide his own actions by pure thoughts and lofty purposes. The pupil observing a daily living example of industry, patience, gentleness, and truthfulness, does not need lecturing nor text-books on morals. Teachers, think of this!

## THE "HENRY BARNARD FUND."

Pedagogical Dept. N. Y. University,	\$250.00.
New York School of Phonography,	10.00.
South Dakota Normal School,	13.00.
A Friend, E. B.,	5.00.
Oswego Normal School.	30.00.
R. H. Caruthers, Louisville,	1.00.
Grace Gilfillan, St. Louis,	5.00.
G. G., Pittsburgh, Pa.,	2.00.
A Teacher, New York City,	1.00.
E. Cutter, " "	1.00.
J. W. Schermerhorn, N. Y. City,	1.00.
H. T. Bailey, N. Scituate, Mass.,	2.00.
Reading Class, Normal School, Castle-	
ton, Vt.,	1.00.
Teacher, Phillipsburg Pa.,	1.00.
R. H. Quick, Redhill, Surrey, Eng.,	10.00.
W. V. Rodrigues, Havana, Cuba,	1.00.
Ehza M. Elliot, Guilford, Ct.,	14.00.

Commissioner W. T. Harris says: "I consider the matter of very great importance. If you can succeed in arousing the educational forces to respond in the sum of \$10,000, I do not know of anything that will redound more to the credit of the men and women who are engaged in the work of education."

THE summer school conventions will be marked this year, as they have been in the past, with mighty efforts for subscriptions to educational papers. As in past years the young teacher, all too uncertain about the future, will be told by some one in authority that he ought to subscribe for the paper published in his own state; anxious to have no one unhappy, he is quite apt to pay down his dollar. We plead for freedom. Let the young men and the young women alone. It is an unmanly thing to take their dollars in the way these words indicate: "W — said in a loud voice, 'A teacher wasn't fit to teach who didn't support the —, and so I took it.'" We gather at great expense from numerous sources (1) means of helping the teacher to teach at once better than he has; (2) we lay open principles so that we become an educator; (3) we show him how he may advance from one stage of progress to another, and thus be able to fill a more responsible position and earn more money. Most educational officials see the enormous value the paper will be to the teachers, and desire them to have it to aid them. On this ground alone it comes to the teachers; it is offered on its merits. We have no quarrel with any educational paper; we like to see other papers flourish; but we do object to any means to get subscriptions that compels a teacher to take a paper he does not want. Teachers, stand for your rights!

A COUNTRY teacher receiving \$25 per month may make himself happy, possibly, by thinking that the head master of Eton school gets \$25,000 per year. He may never get that, but it will show him that one teacher is well paid. By the way, why should it not be possible for one hundred or more teachers in this country to get \$5,000 each when teaching is made a profession? We believe that in fifty years from now all small salaries will have doubled, and most large ones will have quadrupled. Are you doing anything—the very slightest—to cause teaching to become a profession?

TRAVELERS tell us that nowhere in the world is there such good order observed by masses of people as in America. In the *Century* Joseph Jefferson, the actor, speaks of this as follows:

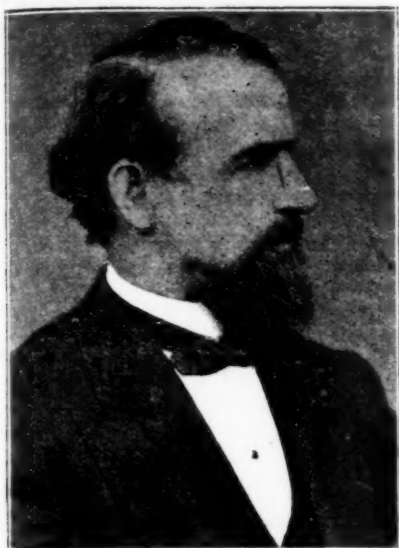
"Look at the decorum observed by the vast assemblages that go to witness our national games. Disturbances are very rare. It would have been indecorous, if not dangerous, when I was a boy, for ladies and gentlemen to visit any public grounds containing such large masses of people, whereas now they can do so with perfect safety. What lies at the foundation of this improvement? People went to church in those days as readily as they do now, and the laws were administered quite as rigidly. There is only one solution to this problem—the free school has done this work."

Right there! Credit our grand free school system with this.

EX-MAYOR A. S. Hewitt, of New York, recently said: "If I were offered a fortune without education, or an education without fortune, I would unhesitatingly accept the education." Here is a good subject for a "talk" with the older pupils. Send us your best "talk."

THE most pitiable thing on earth is a teacher without brains or heart enough in him to get crazy with.





ASST. SUPT. JOHN W. FANNING.

Assistant Supt. Fanning, an excellent likeness of whom we give our readers this week, will be lamented by the teachers and friends of education in this city and elsewhere. He was a man of irreproachable character, faithful in the discharge of duty, and his life and example are well worthy of imitation.

His death occurred very unexpectedly. On Wednesday, June 25, he was present at the graduating exercises of Grammar school No. 72, of which his daughter is principal. He seemed quite well then, but early the following morning complained of a severe pain in his head. At ten o'clock he died, his death evidently being caused by apoplexy. The funeral took place at his residence, Sunday afternoon. His pastor, Rev. W. C. Bittling, officiated, and paid a fitting tribute to his integrity and uprightness of character.

Mr. Fanning was born in this city sixty-nine years ago, and was a pupil in Grammar school No. 5. When only sixteen years of age he was appointed monitor, or lowest assistant teacher. His ability and efficiency led to his advancement, and in 1847 he became the principal of Grammar school No. 12. In 1870 he was elected assistant superintendent, and held this honorable position until the time of his death. In the normal school established by the Public School society, he was the teacher of mathematics, and was held in high esteem by the teachers who were in his classes. From this time it was seen that he had the confidence of the increasing number who believed education to be a success. As a superintendent Mr. Fanning was kind and gentle in the class-room, encouraging pupils by his pleasing manners, and it was rare that a well-taught class failed to secure his commendation. A large number of the teachers, together with his fellow workers and other friends of education, were present at the funeral to testify to the worth of this estimable man.

#### SPENCER'S PRINCIPLES OF EDUCATION.

By DR. EDWARD BROOKS, Philadelphia.

The name we hear quoted more frequently than any other in the discussion of educational questions, is that of Herbert Spencer. He is one of the most distinguished thinkers of modern times, and his name stamps any utterance he may make with authority. His work on education has been widely read, and has been the guide and inspiration of many who are engaged in educational labors.

It has been thought that a brief statement of his views might be of interest and advantage to young teachers who may not have yet read his work. Such a statement will not only afford a clear idea of his leading views upon the subject, but may be an incentive to some to examine his book for themselves. His work is divided into four parts or chapters: (1) What Knowledge is of Most Worth; (2) Intellectual Education; (3) Moral Education; (4) Physical Education. The most important of his views on intellectual education are given under two leading heads, which we may entitle Principles of Education, and A Course of Instruction.

#### PRINCIPLES OF EDUCATION.

In presenting his principles of education, I will follow, so far as is consistent with brevity, his exact language

both in the statement of the principles and the discussion of them.

1. *Science is the worthiest object of study.* This is his first great principle. He discusses it very fully in the first chapter of his book. He makes the end of education to be "complete living." To prepare us for complete living is the function which education has to discharge. This end includes (1) direct self-preservation, (2) indirect self-preservation, (3) rearing of children (4) social and political relations, (5) miscellaneous activities. All these ends, as well as the general end to which they contribute, are best secured by the study of science. This he argues with great ability and happy illustration, and ends the discussion with the triumphant utterance that "while the haughty sisters" of science will sink into merited neglect, "science, proclaimed as highest alike in worth and beauty, will reign supreme."

In this discussion most of his illustrations point in the direction of the physical sciences, and he sets them off in contrast with the study of literature, aesthetics, ethics, etc. His thought is that the best things in modern civilization are the results of scientific education, rather than of literature, philosophy, ethics, or religion.

2. *Education must conform to the natural process of mental evolution.* There is a certain sequence in which the faculties spontaneously develop, and a certain kind of knowledge that each requires during its development. The arrangement of matter and method must correspond with the order of evolution and mode of activity of the faculties.

This principle of course is not original with Spencer; it was enunciated many years ago by Pestalozzi, and is indorsed by Spencer. He says that all improvements in modern education are partial applications of this principle, and quotes approvingly the saying of M. Marcel, that "The method of nature is the archetype of all methods." As corollaries to the principle, Spencer makes several statements that are intended to show its value and application. Among these are:

(a) A normal training system must progress from the homogeneous to the heterogeneous.

(b) In teaching, we should proceed from the single to the combined, from a few subjects to many.

(c) Lessons ought to start in the concrete and end in the abstract.

3. *The education of the child in mode and order must conform to the education of the race considered historically.* In other words, the genesis of knowledge in the individual must follow the same course as the genesis of knowledge in the race. The historical sequence was the necessary one, and education should be a repetition of civilization in little. This doctrine Mr. Spencer properly attributes to M. Comte; and he gives it his indorsement, and presents several arguments in demonstration of it.

While this principle expresses a large portion of truth, it is a question whether it should be followed implicitly. It seems to me that there should be many deviations from it in the actual work of instruction. To illustrate, the science of geometry was developed several centuries before we had a science of arithmetic, yet it is now customary to teach arithmetic first. It would hardly seem advisable to go hobbling through the Roman system of notation and the use of the abacus, as the race did before learning the Arabic system of notation. The race reached the present system of alphabetic written language through the ideographic and verbal systems, and it would seem very absurd to follow this historic order in teaching a little child to read. In the genesis of science, psychology and logic antedated geography, botany, physiology, etc., many centuries; yet no wise educator would follow the historic order in teaching these branches. So that, though the principle has its value, it must be used with great caution in its application.

4. *In education we must proceed from the empirical to the rational.* Every science, Spencer says, is evolved out of its corresponding art. This results from the necessity we are under of reaching the abstract by way of the concrete. There must be practice before there can be science. Hence, language should be taught before grammar, practical drawing before perspective drawing, empirical geometry before rational geometry, etc.

This principle is a most valuable one, and its violation or neglect has been the bane of methods of instruction. As valuable as it is, however, it has its limitations. I would not teach the practice of surveying or civil engineering before the science of geometry and trigonometry, nor the art of dyeing before the science of chemistry. In the training of teachers I prefer to give them a course in the principles of education before permitting them to practice the art in the school-room.

5. *In education the process of self-development should be encouraged to the fullest extent.* Children should be led to make their own investigations, and to draw their own inferences. They should be told as little as possible, and induced to discover as much as possible. Humanity has progressed solely by self-instruction; and to achieve the best results each mind must progress somewhat after the same fashion. The knowledge of objects which a child gets in early years, it gets without help; the child is self-taught in the use of its mother-tongue. If subjects are put before the child in right order and right form, any pupil of ordinary capacity will surmount his successive difficulties with but little assistance. A skilful instructor will make the mind as self-developing in its later stages as in its earlier ones.

This principle, though stated by earlier writers, is one of the most valuable in education. It cannot be too frequently repeated, nor too strongly emphasized. More failure in teaching is due to the neglect of this principle than perhaps any other. It is the point at which the task of the teacher is the most difficult. If a genius for instruction is required anywhere in the work, it surely is here. That teacher who can arouse the self-activity of the pupil and create an appetite for knowledge, will have little difficulty anywhere else in the work. The best part of a school education is not the knowledge acquired, but a taste for the acquisition of knowledge.

6. *The final test by which to judge any plan of culture is whether it creates a pleasurable excitement in the pupils.* When in doubt in respect to the foregoing principles, let this be the criterion. That principle is best which secures the most interest in the mind of the pupil, for a child's intellectual instincts are more trustworthy than our reasonings. Experience shows that there is always to be found a method productive of interest, even of delight; and it even turns out that this is the method proved by all the other tests to be the right one.

Spencer regards this as a very important principle, and devotes several pages to its discussion. The method of culture, he says, should be one productive of an intrinsically happy activity. It has its moral advantages also, and secures more congenial relations between the pupil and teacher. He closes his discussion of it by quoting Professor Pillans, who asserts that "where young people are taught as they should be, they are quite as happy in school as at play, seldom less delighted, nay, often more, with the well directed exercise of their mental energies, than with that of their muscular powers."

This principle, though not original with Mr. Spencer, is also one of great importance. It should be the aim of every teacher to conform to it; and the skill and success of the teacher will be largely measured thereby. Some teachers have the ability to make every subject interesting; others make almost every subject a misery and a drag. And yet the question arises, are there no limitations to the principle? Is there not a discipline in the student's doing something that he does not enjoy doing? Is life a gala day; and if learning is always made a delight, will it fit the student for the unpleasant tasks that meet him in the actual walks of life? Such a question is at least worth asking and considering.

These six principles constitute about all that Mr. Spencer puts forth as the basis of intellectual education. I am not sure that any one of them is new or original with him; every one of them may probably be traced back to writers on education who lived several centuries before his time. It is not certain, either, that he has given any clearer statement of them than had been previously given. But his reputation as a thinker and philosopher gives great weight to them, and has served to call the attention of many persons to them who would not otherwise have thought of them. Besides, he has illustrated them with examples more fully than was ever done before.

#### COURSE OF INSTRUCTION.

The course of instruction that Mr. Spencer lays down is not intended to be complete, but merely suggestive of what a course should be. I will state very briefly the several branches he names, in their order:

1. *For infancy,* he suggests that materials indicated by the spontaneous activity of the faculties be supplied, and suggests how this is to be done.

2. *A regular system of object lessons.* His first formal instruction of the child is by means of object lessons. He speaks of their value, and indicates how these lessons are to be given. His remarks on this subject are interesting and suggestive.

3. *A course in drawing.* Lessons on objects should be accompanied with lessons in drawing. This is indicated by the spontaneous activity of the child. These lessons should not be formal, from a book, as that would make



the study distasteful from the outset. In time the child will see the necessity of representing the three dimensions of a body, and then a first lesson may be given in the elements of perspective.

4. *Primary lessons in geometry.* The elements of geometry should be introduced early. The course should include two things—(a) geometrical conceptions, (b) geometrical constructions. The lessons should be given empirically and incidentally rather than formally and with demonstration. His remarks on the subject are intelligent and suggestive.

This is the extent of the course of study named; and this is designed to be suggestive of the nature of a complete course, and the methods of instruction therein. What has been stated will give the reader a very complete idea of his views on intellectual education; and those who are familiar with the views of previous writers, such as Aristotle, Hortensius, Comenius, Pestalozzi, etc., will be able to see whether he has added anything to their views, and to give him his true rank among the great writers on the subject of education.

### WHAT SHOULD HE DO?

By W. D.

The other day a teacher heard of a two thousand dollar position. "Just the place he wanted." He did not stop to inquire if it was just the place that wanted him, but made application, post haste. A little questioning showed that he was utterly incompetent to fill the position. He had a certain accumulation of facts which he regarded as a sufficient stock in trade, but the business of teaching he knew nothing about.

It was suggested that he spend three years at a normal school in order to qualify himself for the position he coveted.

"Three years! He hadn't the time for that;" but if he could just get the position and the salary for a few years, then he would see about attending the normal school "to top off with."

Sad mistake! It wasn't the "topping off" that he needed; he lacked the *foundation*. This is the trouble with nine-tenths of the people in every walk of life who are full of complaints that the world does not appreciate them. They are on tip-toe waiting to be called up higher; instead of listening to the inner voice that is continually calling them to better work and higher purposes.

The best positions do not go by favoritism, there is work to be done; men and women are wanted who can do it; not those who can think about it, and talk about it, and tell how it ought to be done or how they would like to try it, or how much more they want the salary than the one who is getting it. If you aspire to a higher place than you hold, don't waste time in talking, but *qualify* for the place; learn to do the work better than it is done already, and prove to the world that you can do it.

You think that is the hardest task—to make the world believe in what you can do; no, it isn't. That is quite a job to be sure, but the very hardest thing of all is to do the work; to study, to think, to plod and dig away laying a solid foundation of training and capability—in the shifting sand of day-dreams and idle wishes. No man ever wished himself into anything worth having. Few men ever worked honestly, intelligently, persistently to fit themselves for a position that was not glad to get them as soon as ever they were ready for it.

It signifies nothing that a thousand men are struggling for every single position; *the men are not big enough*; if you want the place you must be bigger than the man who is there now. You must *grow* so fast that your present place won't hold you. You must be so full of heat that something has got to crack; like a handful of corn in a popper.

"Shake, shake, shake. What does the man amount to? Not much it appears. Shake, shake. Must be poor stuff; fetch the shovel, fetch the poker. Once more, shake. Pop! Pop!! Pop-pop-pop!!! Off comes the cover. Get the biggest dish in the house. It won't hold it all!"

If you think the stuff is in you, shake, poke up the fire, and expand.

A WISE teacher is always ready to confess some degree of ignorance concerning teaching.

We are asked what use is the history of education to a primary teacher? This question has been often discussed in our columns. How is it possible for any one to think that the knowledge of the past is not essential to success in the present. How?

### STEPS TOWARD PROFESSIONAL TEACHING.

For fifty years the teachers have complained that they were not regarded as occupying a professional position: this has been the theme of countless papers read at educational associations. We have said but little in this direction, believing that the fault "was not in our stars but in ourselves;" we have urged the teacher to become professional and thus cure the evils that arise from occupying the uncertain ground he now holds.

To render his work professional, evidently the teacher must look at it from a different standpoint from that the itinerant schoolmaster has been accustomed to view it. To know geography, grammar, arithmetic; to acquire a knowledge of a certain mechanical routine of hearing lessons; to be able to maintain order—these have been the attainments the teachers of the past thought needful. A different feeling is now beginning to pervade the ranks of the educators of this country. There is a settled determination to begin the contest for professional recognition.

It is not needful here to state what the difficulties are—they are very numerous; no matter about that—the steps are the same.

1. In every state there are now more or less professional teachers: (a) Normal school graduates, (b) holders of state certificates. (These ought to be of the same value, but in some states a state certificate can be got with but little trouble—it is granted as a favor and not as a right; this must be stopped.) The number of these is estimated to be between ten and fifteen thousand—there are apparently no statistics.

2. The way is open for those in the three under diploma grades to enter the professional ranks. If there should be a concerted effort 10,000 professional teachers could be added every year. We propose to point out the steps.

*First*, let us suppose the teacher to belong to the Third Grade; let him take the Uniform Questions proposed by Supt. Draper of New York state to that grade, as found in THE TEACHERS' PROFESSION, place them before him, study them during the month, and do his level best to answer them.

*Second*, let him take the questions on the (a) history, (b) philosophy, (c) methods, (d) systems, etc., proposed to the same grade by the editors of that paper, and do his level best to answer them. He will have an entire month for this. Then let him compare his results with the answers that will be published the next month.

*Third*, let him take one book, say, "Quick's Educational Reformers," or "Parker's Talks on Teaching," and read it and study it.

These suggestions are for the Third Grade; a similar course should be pursued by the Second and First Grades. But the great thing is to *fix on a course and follow it*. Let the teacher inform his county superintendent that he is aiming at a professional certificate; and when he feels he is ready, let him apply for an examination.

We call on county superintendents everywhere to co-operate with the teachers in this matter.

### STUPID TEACHING OF SCIENCE.

I once visited a large high school, one of the best in the country, with a science teacher whose studies have won him the respect of his fellow-workers. But for some reason, on that day at least, he failed to bring his own knowledge into the class-room. I heard him quizzing a class of boys and girls on animals—not on the animals of the woods and fields, not on the animals before them, for there were none, but on the edentates of South America. An especial point was to find out whether it is the nine-banded armadillo (*novemcinctus*) or the three-banded armadillo (*tricinctus*) which does not dig a hole in the ground for its nest. The book, written by a man who did not know an armadillo from a mud-turtle, gives this piece of information. It was in the lesson and the students must get it. And on this and like subjects these boys and girls were wasting their precious time—precious because, if they do not learn to observe in their youth, they will never learn, and the horizon of their lives will be always narrower than it should have been. Already the work of that day is a blank. They have forgotten the nine-banded armadillo and the three-banded, and so has their teacher, and so have I. All that remains with them is a mild hatred of the armadillo and of the edentates in general, and a feeling of relief at being no more under their baleful influence. But with this usually goes the determination never to study zoology again. And when these students later come to the college, they know no more of science and its methods than they did when, at the age of one year, they first cried for the moon.—*Popular Science Monthly*.

## THE SCHOOL ROOM.

July 12.—EARTH AND NUMBER.

July 19.—SELF AND PEOPLE.

### GEOGRAPHY BY OBJECTIVE METHODS.

BY AMOS KELLOGG.

[CONTINUED FROM THE JOURNAL OF MARCH 8.]

In other lessons the remaining New England states will be taken up as Ohio has been.

For reviews, join the state described with one previously described.

RADIATING REVIEWS.—The teacher draws: (Map 42.)



It will be interpreted by some apt pupil:

"Boston."

"Right, James; you have good eyes. Who can add anything to this beginning?" This will be taken up as previously described. The history of the city, its famous men and institutions, will be described. (Map 43.)



NEW GROUND.—The teacher draws to parallel lines, puts a mountain range on the E. and a river on the W. "Tennessee."

The rivers and towns are added; then descriptions follow: (Map 44.)



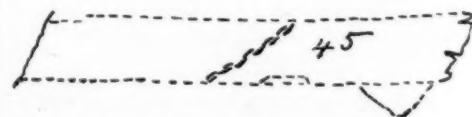
PROPORTION.—It is four times (nearly) as long as wide. COMPARISON.—Its width is about  $\frac{1}{4}$  of Ohio; about that of Kentucky, at Louisville. Southern boundary same as Kentucky.

REVIEWS.—These will include Tennessee. For example:

Ohio, Kentucky, and Tennessee.

Indiana, Kentucky, and Tennessee.

A NEW STATE.—The teacher draws Tennessee, the pupils naming the lines. He extends the N. and S. boundary lines eastward and draws the coast line; adds a triangle: (Map 45.)



"North Carolina," say the pupils.

The rivers, cities, bays, etc., are located; the names given are written on the blackboard and copied by the pupils: (Map 46.)

PROPORTION.—The state is in length (nearly) three times its average width.

COMPARISON.—Its N. boundary is the same as Tennessee. Its S. boundary the same as the N. boundary of Tennessee: (Map 46.)



REVIEWS.

Tennessee and North Carolina.

Virginia and North Carolina.

Kentucky, Tennessee, and North Carolina.

Ohio, Kentucky, Tennessee, and North Carolina.

Ohio, Pennsylvania, Maryland, Delaware, Virginia, North Carolina, etc.

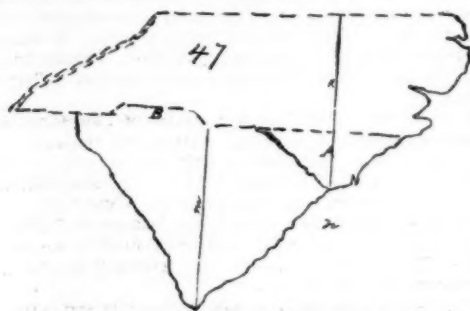


TALKS.—History of North Carolina, battlefields, etc. Climate, productions, etc.

SOUTH CAROLINA.—The teacher draws the parallels for North Carolina and the Savannah river. He then cuts off the triangle A. and the part B.

"South Carolina."

He erases and draws again so as to impress the general form of the state; it is a triangle minus a triangle A. Then the rivers and towns are placed, written on the blackboard, and copied: (Map 47.)



PROPORTION.—The seacoast of the original triangle and the Savannah river are about the same length.

COMPARISON.—The height and top length of South Carolina are about the same. The height of South Carolina and North Carolina are about the same: (M. and N. are about the same.) (See map 47.) The easiest way to draw South Carolina is to make an equilateral triangle and cut off a triangle.

#### REVIEWS.

North Carolina and South Carolina.  
Pennsylvania, North Carolina, and South Carolina.  
South Carolina, North Carolina, and Virginia.  
South Carolina, North Carolina.  
Virginia, Maryland, and Delaware.

#### METHODS OF NUMBER TEACHING.

By L. SEELEY, Ph.D., of Illinois.

#### V.

The child knows all the combinations of the 4, as  $1+1+1+1=4$ ,  $1+1+2=4$ .

$2 \times 2=4$ ,  $4 \times 1=4$ .

$4-1-1-1=1$ .

$4+1=4$ ,  $4+2=2$ .

He very readily applies this knowledge to 400, as  $100+100+100+100=400$ , etc.

Rapidity and accuracy will be acquired and the child will operate with these larger numbers with a facility but little less than that attained with smaller numbers. This is one of the strong points of the Grube system. Every bit of knowledge gained in the earlier stages has constant application in the later ones, in fact, furnishes the key to those greater numbers. The child thus enlarges, step by step, his mathematical conception. Absolutely speaking, it is impossible for any mind to comprehend 1,000,000, but relatively it may be comprehended as 10 times 100,000, which is 10 times 10,000 which is 10 times 1,000, etc., and the Grube system teaches the higher numbers by this process.

In the second half of the third year, numeration, addition, subtraction, multiplication, and division, both oral and written, abstract and concrete, are considered and the pupil is made able to perform all operations that may be demanded in them. Owing to the large numbers that must be used, the pupil has mostly written work, and yet, the oral drill which he has had for two and one half years fits him to do much orally that by other methods is written. The methods suggested by Grube in the fundamental rules are so logical and so simple that there is a great saving of time in mastering them.

The fourth year completes the work of Grube's system and it treats of fractions. The unit being the measure of whole numbers, of it is also the basis of fractions. Whole numbers are ascending higher orders and fractions are descending lower orders. The transition from whole numbers to fractions is so natural and easy that no great difficulty is experienced. Besides the pupil has already become quite familiar with the use of simple fractions. Simple illustrations are used, the chief of which is simply a horizontal line, or several lines with brackets to inclose groups.

Without doubt this system applied to fractions; with the simple, and yet effective illustrations will make this subject much easier both to teacher and pupils.

The pupil is now prepared to take any "Practical

Arithmetic" and complete it in two years, having a far greater knowledge of arithmetic than the average child ever gets. I know of no system that will do as much in number for the child with the same expenditure of time and labor, if faithfully carried out, as the Grube system. At least two years will be saved to the child in his study of number.

#### THE THOUGHT SIDE AND THE MECHANICAL SIDE OF ARITHMETIC.

If one teaches thoroughly all the work in arithmetic laid down in the manual prescribed by the board of education, one must either do much more work in this line than is being done in the average class-room, or else do that work much better. I do not mean that it is impossible in the prescribed time to cover the prescribed ground in a certain fashion, but to teach the applications of arithmetic and to give to the pupils a sufficient amount of practice under each application; to train the pupil to be a nice discriminator in arithmetical thought, and to be a ready worker in arithmetical processes, demands either more time or time much better spent.

I am not making the above statements on a basis of a knowledge of methods used in any particular town or city, but rather on my knowledge of the condition of pupils as demonstrated by their acquirements, having sounded many pupils as they entered my class-room.

And now let us take this average pupil and put him to the test for the purpose of determining the real power, the real acquisition, that his school training has given him in the arithmetical field, for in the result of this test stands or falls the truth of the statements I have made regarding the character of the work being done, in the class rooms of the land, in arithmetic. If the pupil under the fire of this test does not show that the mathematical training he has received in school, has given him the power of quickly and readily concentrating his attention, using with facility the reasoning faculty, opening the door of the unknown with the key of the known, aptness in the detection of a fallacy, readiness in locating the boundary line between that which is true and that which is false, and with all these given him, the skill in the use of the materials through which this power finds expression, then the cause of these failures lies in one element of my original statement—either there has not been time enough given to work so large a field, or else the field has been poorly tilled.

Now the result of our test shows:

1. That the average pupil is a worshiper of figures. Try him and see if this is not so. I mean by this that the average pupil is led in his school experience to give to the sign a position in importance of estimation superior to that which he gives to that for which the sign stands. The pupil is not a trained picture-maker, giving to the problem he solves a foundation even in possibility. Instead of using the figures to make more intelligible the picture he builds, he reverses the natural order, and expending his energy on the manipulation of the husk fails to taste the sweets of the kernel that the husk covers.

To the question, "Where have you seen a fraction?" a variety of responses is elicited. "On my slate," "on the blackboard," "on paper," are among the frequent answers returned. "Of what was it made?" "Of figures," "of numbers," "of a numerator and a denominator, with a line between," come among the many answers.

The thing itself called for does not come to the child's mind at all. Notice also his indiscriminate use of the terms "figure," "number," etc. Test him with actualities; let him demonstrate with diagram upon the board his ability to think in things; or better yet let him use actual objects in the demonstration of his problems. You will soon see the weakness that makes his work in arithmetic a relapse into the darkness of figure manipulation.

2. Our test shows the pupil to be a poor estimator of results. So little action is given to the judgment of the pupil that he can not tell at a glance the approximate result to the work under investigation. And to estimate results with reasonable accuracy and rapidity, is one of the most important and useful of the powers that school-training should give to the child. We see this failing constantly cropping out in the wild returns that are coming to teachers from the pupils under their charge. It is not uncommon for a pupil to return as a product of his effort an answer to a given problem that is so far out of the realms of possibility even, that we are shocked at the result—and yet were the pupil to reason for a moment he could guess a thousand-fold nearer the answer.

3. Again our test shows that the pupil lacks the ability to readily interpret the language of arithmetic. The pupil's work in arithmetic is constantly surrounded with changing arithmetical conditions, expressed to him in more or less definite arithmetical language. The language in which the conditions are presented may be perfectly simple or there may lie a puzzle in the wording that demands from the pupil much thoughtful experience in similar work, before he can correctly and readily read out the thought.

To a consideration of the causes that produce these defects in the training of the pupils of our schools, I must devote space in another issue of THE JOURNAL. B.

## SUPPLEMENTARY.

The teacher will find material here to supplement the usual class work. If rightly used it will greatly increase the general intelligence of the pupils, and add to the interest of the school-room.



MARIA MITCHELL.

#### FIRST PUPIL.

A little girl who lived on the island of Nantucket was very fond of reading, when not washing dishes and taking care of her nine little brothers and sisters. Her father was a poor man, teaching school at a salary of ten dollars a week. He was a great student of nature, and he built a small observatory on his land where he could study the stars, and he was able to earn a little money at the work of the United States coast survey.

#### SECOND PUPIL.

Unlike many people, William Mitchell believed that girls should receive as good an education as boys, and he taught Maria with her brothers, giving her an especial drill in navigation. She left the public school at sixteen, and entered a private school, giving special attention to the studies her father loved. At seventeen she was able to help him in his coast survey, and through this she became acquainted with such people as Professors Agassiz and Bache.

#### THIRD PUPIL.

But Maria felt that she ought to earn more money, and she became librarian of the Nantucket library at a very small salary. She worked here for twenty years, never receiving more than one hundred dollars a year for her work. All this time she was reading and studying, trying to prepare herself for her work in the world.

#### FOURTH PUPIL.

She often spent her nights in looking through a telescope, and one evening in October, 1847, she saw an unknown comet. Her father told some scientific men about it, and it proved that she had made a new discovery. The king of Denmark had offered a gold medal to any one who should discover a telescopic comet. The president of Harvard College wrote to the American minister in Denmark who told the king about the discovery made by the poor young woman on Nantucket island. After some delay the medal was awarded to Miss Mitchell, and her name was in all the scientific papers. She worked harder then than ever on the coast survey, besides writing for scientific journals.

#### FIFTH PUPIL.

For ten years more she went on working in the library reading numberless books, and studying the heavens. At last she went to Europe, visiting England, and making the acquaintance of Sir John Herschel and Alexander Von Humboldt. In Italy she met Mrs. Somerville, the Hawthornes, Miss Bremer, and other celebrated people.



## SIXTH PUPIL.

After her outing Miss Mitchell returned to her home at Nantucket, and worked as hard as ever. She had saved enough from her scanty salary to buy a home for her father, and devoted herself to making him happy and comfortable. At this time she received five hundred dollars a year for her services to the government. The family were living at Lynn now, to be near Boston, and here the woman astronomer spent five peaceful years.

## SEVENTH PUPIL.

All this time some large and beautiful buildings were going up at Poughkeepsie, N. Y., and at last Vassar College was opened. A beautiful observatory was built. Maria Mitchell was asked to occupy it. It was a great honor, but she hesitated, for her father was very old, and she did not wish to leave him. But he wished her to go, and was ready to accompany her. He lived at Vassar for four years, taking much interest in his daughter's work.

## EIGHTH PUPIL.

Miss Mitchell's home was in the observatory. Her treasures, gifts from friends, were there, and there many people went to visit her. Every year in June she gave a "dome party" in the observatory, and those who attended them, described them as delightful occasions.

## NINTH PUPIL.

She often gave earnest, practical talks to the girls who were her pupils. She urged economy upon them, and she set the example of simple dressing, usually wearing black or gray. The students loved her, and it would be a wonder if they did not.

## TENTH PUPIL.

Miss Mitchell's career is a striking example of what a girl can do if she has the will to work, and the patience to wait. She was no genius; she herself said that she was born with "ordinary capacity, but extraordinary persistency." She did one thing, and did it thoroughly, and wrote her name among the greatest of scientists. She died in 1889.

## THE BOOTBLACK HERO.

The teacher can let one of his best readers look this story over carefully, and then read it to the whole school. In a day or two after appropriate questions may be asked.

The following incident is full of thrilling interest, and will make an excellent reading exercise. The narration appeared in the columns of a city daily, and is true to life in every particular:

"Ding, ding, ding" rang the electric gong at the New York terminus of the Brooklyn bridge just at the busiest hour of an afternoon last week. Nearly all in the great throng that was pouring into the entrance turned their heads as they heard the impetuous note of warning. What was this gong? Why was it sounded? Few in the crowd knew; but instinctively they seemed to feel that something serious had occurred. Instantly the policeman whose duty it is to watch the carriage exit at the northern side of the terminus had run to the strongly constructed gate thrown back against the building, and had unfastened it ready for closing.

Then the word passed: "It's a runaway on the bridge, and it's coming this way!"

In another minute the crowd, springing up as it were from the ground, blocked Park Row. Several policemen strove vainly to keep the people back from the end of the driveway. Necks were craned and eyes were strained to catch a glimpse of the horse and wagon which was just coming into view at the top of the long stretch of paved approach to the bridge.

"Here he comes!" was the cry from a thousand throats, and people involuntarily drew back, as if to avoid the crash which might come later on. The horse, it could be seen, was on a dead run, but so far away was he that he only seemed to be moving slowly.

Then it could be seen that a young man sat in the driver's seat and held the reins. His feet were firmly braced against the footboard, his lips were set, and he was exerting all his strength to stop the mad onrush of the horse. But the incline is steep, the animal had evidently "lost his head," and was now dashing to his certain destruction in an excess of mad terror. The policeman, with his hand on the gate, began slowly to close it. It was his intention, should the animal not be stopped, to shut it in his face. People began to picture to themselves the crash, and turned away their heads in horror. There was profound silence in the awestruck crowd, broken only by disconnected exclamations, and

above all the importunate "ding, ding, ding" of the gong.

Down the long incline came the frightened steed, his black coat bespattered with foam, and swayed from side to side by the frantic efforts of the young driver to slacken his gait. In some of these lurches the horse and wagon narrowly missed striking the teams drawn up at the sides of the driveway. From a cab standing a few hundred feet up the driveway could be heard the hysterical screams of a woman. Still the horse had not slackened his speed. The policeman closed the gate and the crowd drew back, as if impelled by one will, holding its breath.

The horse had reached the stone balustrade that walls in the driveway for the space of about one hundred feet from the sidewalk. A bare-legged bootblack, whose face showed pale beneath its coating of dust and grime, was seen standing on the balustrade. Suddenly the boy was seen to spring into the driveway in front of the plunging horse. He seized the tightened reins close to the bit, and raising himself from the ground hung at the horse's head. A shout went up from the crowd. The horse made several more plunges, then swayed from side to side, and finally stopped stock still within a few feet of the stout bars of the gate. The gong ceased ringing. Five minutes later the entrance to the bridge had regained its usual appearance, and no one in the hurrying crowds would have guessed that it had been the scene of an act of heroism.

## MONTH OF AUGUST.

Aug. 4.—PERCY BYSSHE SHELLEY, b. 1792.

Aug. 15.—SIR WALTER SCOTT, b. 1771.

Aug. 15.—THOMAS DE QUINCEY, b. 1785.

Aug. 25.—FRANCIS BRET HARTE, b. 1839.

The above is designed to be put upon the blackboard in time to allow the pupils to look up something about each author.

PERCY BYSSHE SHELLEY has been called the "poet of poets," and some critics regard him as one of the greatest of English poets. He lived in Italy, and was an intimate friend of Leigh Hunt, Byron, and Keats. Shelley wrote several dramas, and some long narrative poems, but his lyrics are his best work. Of these "The Skylark" and "The Cloud" are the best. He was drowned in the Bay of Spezia, July 8, 1822, owing to his boat capsizing in a storm. His body was cast ashore a few days later, and was burned in accordance with the quarantine laws of Tuscany. The ashes were buried in the Protestant burial-ground at Rome, near the grave of Keats.

SIR WALTER SCOTT is often called "The Great Magician" or the "Wizard of the North." He was the author of the famous "Waverley novels," the first of which appeared anonymously. Some of the best of these are "The Antiquary," "Kenilworth," "Heart of Midlothian," "Ivanhoe," "Old Mortality," and "Rob Roy." From 1802 to 1831 there was but one year in which no new work from his pen appeared. "The Lay of the Last Minstrel," "Marmion," and "The Lady of the Lake," are the most important of his poetical works.

THOMAS DE QUINCEY, who is known as "The English Opium Eater," was an eminent English author. He was terribly afflicted with rheumatism, and so contracted a habit for the use of opium. After many years, he conquered it, and reformed. His experiences are related in his "Confessions of An Opium-Eater." He had a great fund of learning, but no power of application. His style was elegant, and Macaulay said of him, "He finished nothing but his sentences."

FRANCIS BRET HARTE was born at Albany, N. Y., of a mixed J. wish, German, and English parentage. At the age of seventeen he went to California and was in turn a teacher, miner, printer, and editor. While setting type for the *Golden Era*, in San Francisco, he sometimes "set up" his own productions when "copy" was called for. After a while the editor found out the merit of his composition, and young Harte was given a desk in the editorial department. In 1868 *The Overland Monthly* was started under his management. The "Luck of Roaring Camp" appeared as a serial in one of the first numbers, and made the young author famous. It was followed by "The Outcasts of Poker Flat," "Tennessee's Partner," "Condensed Novels," etc. His dialect poems, such as "The Heathen Chinee," "The Society Upon the Stanislaus," are very popular. He has also done some excellent work in pure English. "A Greyport Legend," "A Newport Romance," and "Dickens in Camp," are among the best of these poems.

## OUR TIMES.

IMPORTANT EVENTS, DISCOVERIES, ETC.

## NEWS SUMMARY.

JUNE 30.—Explosion at the Standard Oil refinery in Louisville causes a fierce and fatal fire.—Cholera reported at Narbonne, France.

JULY 1.—Riotous gas-workers at Leeds charged by the police and afterward by troops; many persons injured.—Between fifty and one hundred people poisoned by eating ice cream from a New York candy store.—Captain Murrell, the hero of the Danmark disaster, married in Baltimore.

JULY 2.—The provisional government of San Salvador prepares to resist an expected Guatemalan invasion.—Haverhill, Mass., celebrates its 250th anniversary.—The American federation of Labor sends out a circular calling for an international labor congress at the World's fair.

JULY 4.—A cloudburst causes great damage at Milford, N. J.—Connecticut's wild cherry crop ruined by caterpillars.—The nation's birthday very generally celebrated throughout the country.

JULY 6.—Congress ready to take up the river and harbor bill and the tariff bill.

## IDAHO AND WYOMING.

President Harrison on July 3 signed the bill for the admission of Idaho to the Union, and so the American flag now has forty-three stars instead of forty-two. The bill for the admission of Wyoming did not reach him in time to be signed before July 4. These territories were hardly entitled to the dignity of statehood. The two together have scarcely more than population enough for a representative in congress; as states they will each have a representative and two senators—six in all. Wyoming's population is estimated at 100,000 and Idaho's at considerable less. There are eight or ten counties in New York that have more people than Wyoming, and nearly twice that number that have more than Idaho. The Empire state with thirty or forty times the population of these new candidates for statehood will have only six times the representation (36) in the national legislature. However, it is said that "quality tells" and the population of the new states is as intelligent and moral as any in the land. Education is compulsory in Wyoming, and the public schools are of a high order; illiteracy is almost unknown; churches flourish, and the political rights of woman have been recognized for years.

## THE MONEY QUESTION.

For some days very little has been said on the silver question, the bill being in the hands of the senate conference committee. In a short time, when the bill is reported, the fight over it will be as fierce as ever. The free coinage advocates, like Senator Jones, of Nevada, claim that our great increase in population requires for business a large increase in the amount of money; that the scarcity, and hence increased value of gold works injustice to debtors, especially on long time contracts, such as mortgages, etc.; and that statistics through a long series of years show that silver is a better metal than gold because its price is more nearly uniform. They hold also that there is no more of both gold and silver than (exclusive of that used in the arts) is necessary for the coinage of the world. They admit that it will cause an advance in prices, but that is what the country needs. Their opponents point to war times as an example of the effects of inflating money and prices. Then there was a call for such inflation; now there is none. The quality of a currency is of more consequence than its quantity. If it be issued under circumstances that tend to impair its current value, the national credit is assailed. Those who have money to lend hold it, and thus millions of dollars are kept out of business.

It is well to consider here what money is. It is the measure of value, as the yardstick is the measure of distance. The dollar is not always worth the same; but the yardstick never varies in length. Suppose a man should loan another one hundred yards of cloth returnable in one year; and suppose that at the end of that time the yardstick had been shortened to thirty instead of thirty-six inches. He would only get eighty-three and one-third yards in return for his loan. Those who oppose free coinage say this would be just the effect on the dollar—debtors would get rid of paying a portion of their debts. The free coinage men, on the other hand, say this is just, because by the steady increase in the value of the gold dollar, the money lenders have been making money too fast.

A MONUMENT FOR HEINE.—Heinrich Heine will have a monument at Dusseldorf in spite of the opposition on account of race. The poet Paul Heyse is drawing up a manifesto for the German people, and Ernest Herder has prepared two designs for a statue, which William II. has inspected. Tell something about Heine.

GERMANY'S AFRICAN CLAIMS.—A German caravan of two thousand has started for Unyamwezi, south of Victoria Nyanza. The Germans propose to take possession of the



country around the great lakes. Unyamwezi is the garden region of Africa between Zanzibar and Lake Tanganyika. Here center caravan routes from all points of the compass, and here is the great Arab settlement of Tabora, the busiest and most important of all their interior towns. What claim has Germany to this land?

**CANNOT DISPLAY THEIR FLAG.**—The Cracow police forbade the display of the Polish revolutionary flag at the reinterment of the body of the poet Mickiewicz. Many deputations from Switzerland, France, and America therefore did not attend the ceremony.

**THE PRESIDENT'S FLAG.**—United States Minister Reid presented the American Art Student's Association with the flag sent by President Harrison. In what way does the French flag resemble ours?

**CONSUL-GENERAL TO PARIS.**—Gen. Adam E. King, the new consul-general to Paris, was Gen. Hancock's chief of staff, and later one of Gen. Meade's aides. What are the duties of a consul-general?

**ARMENIAN CHRISTIANS COMPLAIN.**—The Armenian patriarch complains to the sultan of Turkey that numerous Armenians have been arrested on the mere suspicion of wrong doing, that their churches have been profaned, and other outrages committed against them.

**KALAKAUA'S TROUBLES.**—The assertion was made in the Hawaiian legislature that there had been a plot to replace the king on the throne by his sister, and that the ministry were to blame for the insurrection. It also was planned not to let the king know all the facts connected with the treaty with the United States. It seems that there are too many foreign officials to suit some. The motto of the opponents of the king has been, "Hawaii for Hawaiians." The Hawaiian party charge their opponents with conspiring to form a republic.

**CONGO COFFEE.**—The first coffee grown on the Congo for the European market was lately received at Antwerp. It was raised at Leopoldville, three hundred and twenty-five miles from the coast. It compares well with that received from Java, Hayti, and Santos. It is believed that the chief value of the Congo will be its coffee and cotton plantations.

**RAILROAD BUILDING IN MEXICO.**—About a mile of steel rails is being laid daily on the Southern railroad. This line, with its connections, forms a connecting link in the railroad system to the Guatemalan frontiers. How will this road benefit the United States?

**SAFETY VS. SPEED.**—The inquiry into the cause of the accident to the *City of Paris* is finished. The accident was due to the wearing of the propeller bearing. The safety of the passengers was not sacrificed to speed.

**CHINA WILL RETALIATE.**—The Chinese minister to the United States, Brazil, and Spain, recently arrived in this country. His people, he says, are very much dissatisfied on account of the Chinese exclusion act. The indignation against the former minister, because he assented to the act, was so great that his house in China was burned. It is stated China will retaliate by excluding Americans from that country. What are some traits of the Chinese?

**A SALEM LANDMARK DESTROYED.**—The old Endicott mansion in Salem, Mass., was torn down. The building was framed in England, brought across the Atlantic, and first set up in Gloucester. In 1638 it was purchased by Gov. John Endicott, the first head of the first popular local government established in America. It was afterward taken to Salem, rebuilt by Endicott, and used as the permanent residence of the governor. The huge oak timbers were apparently as sound as when hewn three centuries ago.

**STANLEY COMING.**—The great explorer will come to this country in a few months. His first lecture will be delivered at the Metropolitan opera house in New York for the benefit of a charity. What are some things Stanley has done?

**CANNIBALS ON COFFEE PLANTATIONS.**—The Pahouin or Fan cannibals who live near the Ogowe river, West Africa, are becoming popular as laborers in the service of the whites. They are found to be more careful and industrious than the coast natives, and are engaged on some of the coffee plantations in Gaboon both in planting coffee trees and gathering the crop. In what other countries are cannibals found?

**FRANCE WILL RETALIATE.**—Members of the chamber of deputies called upon the minister of commerce and urged the retention of the law against the importation of American lard. The minister (referring to the McKinley bill) said France could not meet America's avowal of an economic war by concessions. What is here meant by retaliation?

## OF SPECIAL INTEREST TO PUPILS.

**THE EFFECTS OF COFFEE.**—A Berlin physician has been investigating the effects of coffee on working people near Essen. Many of them consumed over a pound of coffee in a week; and some men drank considerably more, besides beer and wine. The leading symptoms were profound depression of spirits, and frequent headaches, with insomnia. Strong coffee would relieve this, but it would soon return, the muscles becoming weak and trembling, and the hands trembling when at rest. The heart's action was rapid and irregular, and dyspepsia was also present. The face became sallow, the hands and feet cold, and an expression of dread and agony settled over the countenance. Acute inflammations were liable to appear. Melancholy and hysteria were present in all cases.

**QUEER SALUTATIONS.**—"When in Rome do as the Romans do" is an old saying, which simply means that one must conform, as nearly as possible, to the ways of the people one visits. The traveler around the world would have to adopt some queer salutations. Prostration is one of the oldest modes in Asia. The Tartars scratch their ears, and the Thibetans put out their tongues. In giving an account of his interview with the chief of the police in Thibet, M. Huc, the missionary, says, "After politely putting out our tongues, we withdrew." Scarcely any savage ceremonial of this kind permits personal contact. It may be that mutual distrust is the reason for this. As an exception to the rule, is the rubbing of noses among the Maories of New Zealand; but such exceptions are rare.

**TEMPERED COPPER.**—There is no doubt that the ancients knew how to make edged tools of copper. A company at North East, Pa., claims to have re-discovered this process, and to be able to supply any and all kinds of copper implements cast solid, tempered to any gauge that the work expected of them demands.

**HELIGOLAND.**—This mite of land (that Germany got in exchange for Zanzibar and Uganda, which give England the key to central Africa) is in the North sea opposite to and about forty miles from the mouth of the river Elbe. It is about one mile long from north to south, one-third of a mile wide, and three miles in circumference. The inhabitants are Frisians, and mostly fishermen and pilots. They did not want to become subjects of Germany because of the enforced military service, and cast-iron tariff laws of that country, but their wishes were not consulted. Germany will probably fortify the little island, as it would help protect a weak point in case of another war with France. During the war of 1870 it was necessary to detach a large force to guard against a possible French landing at the mouths of the Weser and Elbe rivers, and to lay submarine mines to protect the water approaches to Hamburg and Bremen.

**OZONE.**—A company has been formed in Berlin to supply ozone on a larger scale than has hitherto been attempted. The idea is gaining ground that ozone can be employed for many sanitary purposes. As the Berlin doctors employ ozone, the company have placed on the market ozonized water. The name for it is "antibacterikon." When added to water containing living organic matter in the dark, a phosphorescent appearance is caused and the organisms are destroyed. At present ozone is manufactured from oxygen obtained by heating pyrolusite and using electricity. It is believed that many epidemics, e. g., influenza ("the grip") come when there is not enough ozone in the air, and that they may be cured by taking ozone.

**A PRACTICAL TEMPERANCE LESSON.**—Chauncey M. Depew recently said: "Twenty-five years ago I knew every man, woman, and child in Peekskill. And it has been a study with me to mark boys who started every grade of life with myself, to see what has become of them. I was up last fall and began to count them over, and it was an instructive exhibit. Some of them became clerks, merchants, manufacturers, lawyers, doctors. It is remarkable that every one of those that drank is dead; not one living of my age. Barring a few that were taken off by sickness, every one who proved a wreck and wrecked his family did it from rum, and no other cause. Of those who were church-going people, who were steady, industrious and hard working men, who were frugal and thrifty, every single one of them, without an exception, owns the house in which he lives and has something laid by, the interest on which, with his house, would carry him through many a rainy day."

**A PRINCE BECOMES A DUKE.**—Americans wonder why Mr. Gladstone, Lord Salisbury, Lord Tennyson, and others possessing brains and worth, should pay such marked attention to those whom accident of birth has favored, but who have little else to recommend them. The recent taking of the oath as Duke of Clarence by Prince Albert Victor of Wales in the House of Lords called together a brilliant assemblage. The Prince of Wales, his father, and the Duke of Edinburgh, his uncle, were present in dual robes. After the usual formalities, the Duke of Clarence took the peer's oath and signed the rolls. He was then conducted to the bar, where he bowed thrice to the throne.

## CORRESPONDENCE.

Correspondence is welcomed, provided that it is written upon one side of the paper only, and is signed with real name and address. Many questions remain over until next week.

## HOW A BAD BOY WAS SAVED.

"The education of a child begins 100 years before the child is born." This is true morally, as well as intellectually. I once had a pupil whose education was in the wrong channel, at least 100 years before he was born. Therefore, I had the climax of 100 years' bad education. As I had studied human nature I relied a great deal on first impressions. From a phrenological standpoint I saw I had a difficulty. My predecessor, an old teacher, said that he had to wind this boy up every Monday morning with a good hickory in order to keep him within any bounds. His father told me if I could do anything with him it would be more than he or any one else had done. I began to record the names and ages the first day, but before I got through, his mischief began to crop out; before noon he was swearing, and I could not get him to do anything, or even keep him from talking. Several plans were tried, and at the end of the third day I came to the conclusion that the old teacher did not know how to whip. As I was 20 years old, and strong physically, I resorted to the old plan and gave him a thrashing that would make the lords of creation recoil. After a while I discovered that he admired a pretty card. I gave him one, and told him if I did not have to speak to him for one week I would get him another. I had found the philosopher's stone! That boy went from the first reader to the third before my three months' term closed! This was a triumph! The boy was saved! Thank God for the new education! F. M. KIRKENDALL.  
Berlin Cross Roads, O.

1. Do pure liquids ever foam? 2. Why does oil still a stormy sea?

1. In a recent lecture Lord Rayleigh insisted that foaming liquids were essentially impure, for pure liquids will not foam. For instance, neither water nor alcohol can be raised into a froth, although a mixture of the two may be to a certain extent. The addition of gelatine to water in the proportion of 1 in 100,000 develops the foaming quality quite noticeably. Of course, the best known foaming liquid is a solution of soap, such as the children use for blowing bubbles. 2. All liquids have films. These may be likened to a stretched piece of India rubber, their tendency to contract never ceasing. Oil forms a film on the surface of the water, and covers it entirely, even if it be collected into drops. As the waves advance, the surface has to submit to periodic extensions and contractions. At the crest of a wave the surface is compressed, while at the trough it is extended. So long as the water is pure, there is no force to oppose this; but the oil makes it tend always to spread itself uniformly. The result is that the water refuses to lend itself to the motion which is required of it. The film of oil is like an inextensible membrane floating on the surface of the water, and hampering its motion.

1. What northern points have been reached by explorers? 2. What is meant by the "O Grab me act"? 3. What generals gained three victories in a single day? W. H. P.

1. In 1881 Lieut. Barry, U. S. N., explored Wrangel's Land, and in September attained the highest latitude yet reached in this sea—78° 44' N. Lieutenant Lockwood and Sergeant Brainard of the Greely expedition, in the winter of 1881-2 unfurled the American flag at the highest point yet reached by man—83° 24' N. (on the Greenland coast.) 2. The embargo act of 1807, which detained American vessels in the ports of the United States, in order to cut off commercial intercourse with France and Great Britain, and compel them to recognize the rights of American neutrality. The opponents of the measure ridiculed it by calling it the "O grab me act," spelling the word embargo backwards. 3. Cimón, the son of Miltiades, and Zachary Taylor.

I find that many teachers, and some arithmetics, differ as to how the following expressions should be read:

- |                  |   |
|------------------|---|
| 1. $5+3=8$       | 4. $15\div5=3$  |
| 2. $5\times3=15$ | 5. $\frac{3}{5}$ of $15=9$  |
| 3. $5-3=2$       | 6. $\frac{3}{5}\times\frac{5}{3}=\frac{15}{15}$ (or $\frac{1}{1}$ ) |

Some say, "Five and three are eight; five times three are fifteen," etc. Others say, "Five plus three is eight; three times five is fifteen," etc. I will consider it a great favor if you will write me how each should be read, state the reason for so reading it, and the reason why the other expressions used are incorrect.

G. A. L.

If we say "Five ones and three ones are eight ones," we are evidently using correct English, but if we say "Five plus three" meaning, "The sum of five plus three" the verb that follows must be "is" not "are." It all depends upon how we take it, so it has come to pass that both classes of expressions have been considered correct English. In other words it is a case of collective nouns, when the verb is in the singular and of a union of simple, common nouns when the verb is in the plural.

Can you tell me something more about the African dwarfs that have been mentioned in your paper?

H.

Stanley describes a man and a woman he saw near a place called Avetico on the Ituri river. The man was about four feet high, the woman a little less. He may have weighed about eighty-five pounds, and his body was the color of a half-baked brick. He knew the mysteries of woodcraft—what wild fruits were wholesome and what fungi were poisonous. Stanley's party passed through about one hundred villages inhabited by these pygmies.



Long before the party reached them they were deserted and utterly cleaned out. About fifty of the little people, however, were captured by foragers and scouts, only one of whom reached the height of fifty-four inches. Their height was usually from thirty-nine to fifty inches, and most of them were well-proportioned. The pygmies perform valuable service to the larger aborigines by warning them of the advance of strangers and assisting them to defend their settlements. A forest village consists of from twenty to one hundred families of pygmies, and probably in that area between the Iburu and Ituri rivers there are as many as two thousand families living a nomadic and free life in the perpetual twilight of the great and umbrageous forest of equatorial Africa.

In my contract to teach I was to have my pay every month. I have received my pay for the first month, but when the second month was up there was no money in the hands of the collector, so I did not get my pay. Is there any chance for the district refusing to pay me, because I did not get it when due? If so, is the trustee responsible for it? I had a written contract with him.

ANXIOUS.

You will undoubtedly get your pay. Find out when you will be paid.

\* What was the cause of the duel between Clay and Randolph in 1820?

The duel was fought because Mr. Randolph had spoken of the coalition of Mr. Adams and Mr. Clay (by which the former was elected president of the United States, by the House of Representatives in place of Gen. Jackson) as a "combination of the Puritan and the Blackleg."

Where was Dakota divided to make the two states? What are the capitals?

In the "omnibus bill" in congress it was provided that the state be divided on the line of the 7th standard parallel produced due west to the western boundary of the territory. This makes nearly an even division, North Dakota having 74,312 square miles and South Dakota 76,630 square miles. By the same act North Dakota was given one representative in congress and South Dakota two. 2. Yankton was formerly the capital of Dakota, but the capital was removed to Bismarck, which is now the permanent capital of North Dakota. Pierre is the capital of South Dakota.

What shall I do if I do not keep a pupil after school for laziness and misbehavior? I have followed your suggestions and succeeded in nine cases out of ten, but now and then I have a case as to-day, when a boy goes off with a triumphant expression on his face because he has not rectified a single lesson as he should. I am led to inquire, "Ought I not to have kept him in?"

ANNA LIDSON.

Perhaps he will go off "with a triumphant expression." What of it? We advise you to look for other means to procure good lessons than "keeping in." Suppose the minister should call you up after his sermon and catechise you, and you should show you had been inattentive by your answers, how would you feel if he should make you stay and hear the sermon read again? Possibly you might give better attention the next time, but you would stay away if you could. The general effect upon the character must be looked at.

A man wished to give some beggars 10 cents each, but finding he had not money enough by 9 cts., he gave them 8 cts. each and had 5 cents remaining. How many beggars were there?

1. Why don't you say there were  $b$  beggars then  $10b - 9$  expresses what he had by first statement. And  $8b + 5$  is what he had by the second statement. Then these equal each other. Then  $2b = 14$ ;  $b = 7$ .

1. Why will sound travel through twelve folds of a dry silk handkerchief and not through one fold of a wet one? 2. Does the reflection of the sun's rays cause heat? H. A. S.  
New Boston, Ill.

1. Is it a fact? 2. Try it.

Will you please answer the following question in THE SCHOOL JOURNAL? Which is the proper way to diagram this sentence:—"That which the fool does in the end the wise man does in the beginning."

This (which you suggest) is correct.

Man	does	that
		in beginning
fool	does	which

Please state what authority there is for using this (+) before a number; for instance,  $+25$  Clinton place. L. H. W.

It is simply custom.

KINDERGARTEN TRAINING.—Please tell me in the next SCHOOL JOURNAL, where in Pennsylvania I can be trained for kindergarten work. Have we a good school of this kind? S.

There must be several in the state. In Philadelphia instruction is given in the normal school, and we suppose most of the state normal schools do also. Write to Dr. E. O. Lyte, Millersville, Pa.

Does the moon give light, or does she only reflect the sun's light? J. E.

The moon reflects light.

## EDUCATIONAL NOTES.

### EDUCATIONAL ASSOCIATIONS AND SUMMER SCHOOLS.

Alabama, State Ass'n, Montgomery, June 24-6.  
American Institute of Instruction, Saratoga, July 7-10.  
Arkansas, State, Mt. Nebo, July 8.  
Delaware, State, July.  
Illinois, Southern, Carle, Aug. 20-28.  
Kentucky, State, Hopkinsville, July 1-3.  
Kentucky, State, Frankfort, June 25-7.  
Louisiana, State, Shreveport, July 2-3.  
Maryland, State, Bay Ridge, July 8-10.  
Missouri, State, Sweet Springs, June 27-8.  
Missouri, State, Bonne Terre, July 15.  
National Association, St. Paul, July 8-11.  
New York, State, Saratoga, July 7-9.  
Ohio, State, Lakeside, July 1-3.  
Oregon, State, Salem, July 1-3.  
Pennsylvania, State, Mauch Chunk, July 8-10.  
Southern Educational Association, Morehead City, N. C., July 1.  
South Carolina, State, Greenville, July 16-18.  
Tennessee, State, Memphis, July 1-3.  
Texas, State, Galveston, June 24-6.  
West Virginia, State, Moundsville, July 1-3.

### SUMMER SCHOOLS.

Pennsylvania Summer School, Wilkesbarre, July; Altoona, Aug.  
Lake Minnetonka Summer School, Excelsior, Minn., July 8—August 5.  
Arkansas Summer School, Mt. Nebo, July 8—Aug. 15.  
White Mountain Summer School, Littleton, N. H., July 9—20.  
Wisconsin Summer School, Madison, July 14—August 8.  
Erie (Pa.) Summer School of Methods for Teachers, July 14—August 8.  
Interstate Summer School, Edinboro', Pa., June 30—July 11.  
Columbus, Ohio, July 14—July 25. Pottsville, Pa., July 21—Aug. 1. Asheville, N. C., July 28—Aug. 8. Jefferson, Ohio, Aug. 1-15. Grand Rapids, Mich., Aug. 18-29. Detroit, Mich., Aug. 18-29.  
Summer School of Methods for Teachers and Kindergartners, Pacific Grove, Cal., July 1-6—August 6.  
Monteagle (Tenn.) Assembly, July 1—Aug. 25.  
Harvard University Summer Courses, July and August.  
School of Expression, Newport, July 5.  
Chautauqua College and Schools, July 5—Aug. 15.  
Amherst Summer School, Amherst, Mass., July 7—Aug. 8.  
National Summer School of Elocution and Oratory, Grimsby Park, Ontario, July 7—Aug. 15.  
Boston Summer School of Oratory, July 8.  
Duluth Summer School of Languages, July 8—Aug. 16.  
Savauve Summer School of Languages, Burlington, Vt., July 9—Aug. 19.  
Martha's Vineyard Summer Institute, July 14.  
Southern California Summer School—Santa Monica, Cal., July 14 to August 22.  
Bay View, Michigan, Assembly and Summer University, July 16—Aug. 13.  
Glens Falls, New York, Summer School and National School of Methods, July 20—Aug. 16.  
Nova Scotia School of Science, Parrville, July 21—Aug. 2.  
Teachers' Training School at Salamanca, N. Y.—July 20—Aug. 22.  
State Normal Institute, Troy, Ala., Aug. 11.

THE "National League for the Protection of American Institutions" is making objection to a bill now before the Senate. It has passed the House of Representatives. It objects to providing for the support and education of pupils at St. Joseph's normal school at Rensselaer, Ind.; for the support and education of Indian pupils at St. Boniface's industrial school at Banning, Cal.; for the education and support of Indian children at the Holy Family Indian school at Blackfoot agency, Montana; or \$5,000 for the Sisters of Charity to educate Indian pupils in the industrial boarding school at Devil's Lake agency, North Dakota. There has been \$25,830 appropriated for these schools.

The National League favors common schools among the Indians, and would have no money paid from the national treasury toward the expense of educating Indians, except for the establishment and maintenance of non-partisan, non-sectarian common schools.

The League says the Bureau of Roman Catholic Indian Missions will not employ the course of study marked out by the Indian office in its schools, and objects to submitting evidences of the qualifications of the teachers it employs, that out of a total of \$561,950 appropriated to religious bodies for Indian education for this year, \$356,957 was given to Roman Catholic schools.

It says that its position in this matter is simply one of opposition to a union of church and state, to any extent.

THE first year of the Chico, Cal., normal school has just closed. The organization of this school is as complete as could be expected so early in its history. The closing school year has been one of unqualified success, and the work thorough and practical. Principal Pierce has evinced great ability in its management.

Eighteen counties have been represented, and one hundred and ten students enrolled. The students have

shown a degree of earnestness that augurs well for their work when they become teachers.

During the coming year the faculty will be enlarged and the training school organized. There will also be a grammar department to be under the supervision of a graduate of the Illinois state normal university, and a primary department in charge of Miss Elizabeth Rogers, of the New York normal college.

A course of lectures on history, science, art, and political economy will be given in Normal Hall during the coming year. Several prominent gentlemen of the state, among whom are university professors and judges of the supreme court, have consented to come to Chico and lecture on literary, scientific, and practical subjects.

AMONG the topics discussed by the Hornellsville Teachers' Association were the following:

The object of education is to develop the spark of intellect till all our acts shall spring from a choice that is the result of a judgment formed.

The accumulation of facts is not education, because it does not develop the power of thought, and hence, of choice.

Education may be along moral lines or along intellectual lines. If along moral lines only, it produces goodness, which will be strong or weak according as faith is strong or weak.

Stalwart manhood or womanhood is the product of clear thinking.

Intellectual power should be guided by moral perception.

The office of moral power is to guide the intellectual into right channels.

Much that passes as morality is simply innocence.

TRUTH can, by right teaching, be associated with RIGHT in the mind of the child.

Few young people will long follow a right course simply for the sake of being right.

The constant pursuit of truth at last makes the separation of truth from error a habit.

All studies that show the relation of cause and effect are specially rich in material for character-building.

All careful classification of objects by their manners, habits, traits, and similarities or differences, makes possible a distinction between right and wrong.

A careful student is much more likely to be morally correct than a slovenly one.

There is, then, a close relationship between right teaching and right doing.

It is hard for a lover of nature, and harder still for a student of nature, to be immoral.

Moral ideas have their origin IN THE RELATION OF THINGS.

All development of the reasoning faculty makes the growth of moral ideas possible.

The teacher who encourages her pupils to look habitually behind first appearances is cultivating moral power.

The teacher who leads her pupils to distinguish between the false and the true, the REAL and the APPARENT, is laying a foundation for moral character.

The teacher who encourages her pupils to work for arithmetical answers, without reference to processes, is cultivating the habit of securing an end by any means, right or wrong.

It is not enough that a teacher should be moral, she must be aggressively so.

A teacher must study to find the moral lessons that underlie all school work.

The greatest souls often are associated with the dullest minds. Commend every noble act you see, and be thankful for every noble trait you discover in your pupils.

As the ancients bared their heads in the presence of their gods, so a teacher should walk reverently in the presence of fifty human souls.

THE state of Mississippi did well. It fined John L. Sullivan, the champion prize fighter, \$500 for fighting on its soil. Sullivan paid the fine and thus learned a lesson. If the court had charged him \$5000 we would have been better satisfied. Every teacher struggles to keep fighting down; yet there are any quantity of well-dressed roughs who want big men to fight for money! Disgusting!

THE World's Conference of Christian College Students, at Northfield, June 28, brought together over 400 delegates, including over thirty Japanese students. One hundred American colleges were represented; in addition to these, seventeen students from the leading European universities, including Oxford, Cambridge, Edinburgh, Aberdeen, St. Andrews, Dublin, Paris, Berlin, and Upsala, Sweden.

THE teacher ought to be profoundly interested in temperance. The chairman of the London school board, Mr. J. R. Diggle, says that intemperance has physically and intellectually a bad effect upon children. They are unfitted to study, and their moral sense is ruined. He proposed that temperance teaching in schools should be indirect, for a very considerable portion of the children had drunken parents, and nothing would be more injurious than to preach the evils of intemperance directly to those children, who were, unfortunately, often keenly alive to its results. A result of the special teaching in the London board schools has been to make eight out of every twelve children in those buildings



members of Bands of Hope. He further thought that temperance lectures should be given at teachers' training colleges.

In Stratford, England, a teacher wrote to a parent: "The committee of the whole board desire me to send a copy of the following resolution passed: 'The boy Paine has clearly been guilty of lying and attempted conspiracy. On any repetition of such an offence, the board will bring the case before the magistrates, with the view of sending the boy to a reformatory school. If, therefore, the boy comes back to any of the board's schools, he will be subject to the established school discipline.'" The teacher was summoned for libel, but the case was dismissed.

THE Peabody institute at Florence, Ala., closed, June 21, its four weeks' session. Pres. Powers, Ala. normal school, Prof. C. B. Van Wie, Miss M. B. Rode, of Birmingham, Mr. W. M. Allen, and Miss J. S. DeVoe, assisted as teachers.

SUPT. GREENWOOD'S article in THE JOURNAL, in which the following occurs, has been criticised considerably:

"Yet there are numskulls who would keep this little fellow, when he is a year or two older, five or ten months on numbers from one to ten. So, also, children are kept writing, and spelling, and reading little short words that they already know, which, when once learned, are learned for all time. This narrowing process brings the child's horizon too near. Instead of a stationary horizon, it should be continually enlarging."

The first sentence is likely to mislead, because it does take a year to have a pupil know the numbers from one to ten. It is an error to keep a pupil on "little short words they already know," if no new words are given. There is a good point in the last sentence. We think those who quote from us should give the author, otherwise the editors are supposed to have written the article.

WHEN teachers say they have difficulty in getting their scholars to write compositions we don't know how to account for it. There are several thousand stories from pupils sent to TREASURE-TROVE every month. It is one of the surprising things, how the pupils are taking to story-writing. There is no compulsion, not in the least; on the contrary the teachers say that the children are eager to do the writing. If any teachers want to be blessed with enthusiastic pupils and would like to see what can be done by such, let them send for copies of TREASURE-TROVE to E. L. Kellogg & Co.

PRINCIPAL EDGAR C. STILES, of the Seymour high school, Conn., received an offer from Hartford, but his board promptly raised his salary to a sufficiently large figure to induce him to remain, in this substantial way they show their appreciation of the excellent work he has done in the one term he has been in Seymour. May many others be treated in the same way.

THE bunting flag offered by the *Youth's Companion* to the school in each state furnishing the best essay on "The Patriotic Influence of the American Flag When Raised Over the Public Schools," was won for the state of Wisconsin by Miss Roxy Knapp. She is a pupil of the West Bend school, and is 17 years of age.

ENGLISH free schools are growing more careful as to cleanliness; especially is this true at Broxburn. At a recent meeting the clerk intimated that he had only received one application for the washing out of the public school. The rooms are twelve in number, and the applicant has to provide all materials. The rooms are to be washed out monthly, instead of once a year as formerly. The sum sought by the applicant was £5 12s. per month. The board, however, considered this sum to be exorbitant, and possibly, therefore, may relapse into a yearly outscouring. The *Schoolmaster*, from which we get this information, has a mission yet to perform.

In spite of the attention that of late years has been given to sanitary matters, it is evident there is yet much to learn. Typhoid fever was recently communicated to forty persons in Waterbury, Conn., from a dairy farm in the adjoining town, through the agency of milk. Among the victims was the city engineer who was himself a sanitary reformer. The circumstance shows the necessity of frequent inspection of suburban dairy farms.

In an examination in a Boston public school, according to the *Traveller*, one little girl said in her history paper that "in 1620 the Pilgrims came to Massachusetts

for the purpose of fighting the battle of Bunker Hill." Another said: "In 1682 William Penn explored Pennsylvania with a crew of Quakers." A small boy said: "Of all the countries, I would rather visit England, because I want to see the Thames river and the beef-eaters." This is nothing against Boston; it is against "book teaching." It is not necessary for these children to know about things so far from them and out of their horizon. Friends in Boston, teach what is near and comprehensible. The educational millennium is a long way off, we fear.

In Philadelphia the members of the board of education wanted to sit on the front seats of the platform when the girls of the normal school graduated; the girls wanted to sit there because it was their day. It was argued that the board had done much for the school, so the girls yielded; but the girls got some platforms put up where they could be seen. They reasoned that people wanted to see the girls—they were right.

PEOPLE will be interested to know something of Miss Fawcett, the Newnham college girl who is at the head of the mathematical tripos of Cambridge, and is senior wrangler for the year. This is a great distinction, and for the first time it has been won by a woman. It is one of the severest tests to which students can be subjected, and, moreover, it is in the branch of science in which it has been held impossible for women to excel. Miss Fawcett is a very young lady, being only twenty-two. She is the only daughter of an eminent statesman, whose name is everywhere known and respected. Her appearance is anything but strong-minded. She dresses in a simple, neat manner. She has perfect self-control, and went down to her examination without a flutter of the nerves. Before the ordeal she slept every night as soundly as usual, and wrote her papers coolly and calmly, without any erasure.

The room occupied by her at Newnham is a pretty one, looking out on the college gardens. It is simply but attractively furnished, and decorated with photographs, and water color sketches. Of course there are volumes and volumes of mathematical works, but there are novels and poetry as well. A work-basket is also found here, for the senior wrangler is an expert needlewoman, and as fond of her embroidery as any other girl.

An interesting fact must be added. Twenty years ago when Miss Fawcett was a mere baby, a meeting was held in her mother's drawing-room, and at this meeting the plans for the foundation of Newnham were laid.

THE New Brunswick, N. J., *Home News* says, "Rutgers College grammar school has had a very successful year under the management of its head master, Mr. Cook. There were 142 pupils, and 18 were prepared for college."

PRINCIPAL EDWARD L. PIERCE, of the Chico normal school, Cal., has arranged a plan for a training school:

"The object is to have a school where the best methods of teaching may be illustrated for the benefit of students, and where they may be called upon to put in practice their knowledge of the art and science of teaching. Every student will be required to observe the work during part of a term, and make notes of his observations. He will also be required to take entire charge of a class in one study for at least half a year, and be responsible for the work. The principal of the normal school and the critic teachers will take note of the progress of the children, the student teacher's manner with his class, his assignment of lessons, his devices for gaining and holding the attention of the class, and his general qualifications and tact as a teacher."

THE immense gathering of Confederate veterans at Richmond, at the time of the unveiling of the Lee monument, displayed their old battle flags, in a manner that offended the loyal people of the country. We don't want to take away their past, it is a sacred heritage to them; they have a right to it; it was a gallant fight they made. But the past is gone; the flag over them to-day is the glorious stars and stripes; we call on them to allow no flag to stand above it. At Chattanooga on July 3, the United Confederate Veterans' Association met and decorated the city with the stars and stripes. Among the inscriptions on the street arches were these:

"No more loyal citizens to day than the boys who wore the gray;" "We wore the gray, but truly say we honor the flag that floats to-day;" "Backward looking are our thoughts to-day, but in the glorious future of our reunited country live our hopes;" "American patriotism is bounded by neither state nor sectional lines;" "We meet to celebrate Independence day, a common heritage of those who wore the gray;" "The stars and bars a sacred emblem; the stars and stripes a living symbol."

Here are true patriotic sentiments. Teachers of the South, float the stars and stripes over your schools and teach your pupils to love and honor it. The animosities of the past will thus disappear.

VERY interesting exercises took place at the graduation of the 37th class of the state normal school at Providence, R. I., June 29. The exercises consisted of addresses, musical selections, and essays by the graduates. After the reading of the essays, Principal Littlefield introduced Hon. Percy D. Smith, who with an appropriate speech, presented a flag purchased by order of the state legislature.

In his address to the graduating class, Principal Littlefield, said: "It is not with the material of the intellect alone that you will build, but also with that of the sensibility and the will, the moral nature as well as the mental; and the physical organism of the human body, your studies have taught you, holds the most vital relation to spiritual welfare."

Speaking of the purely mental field of your labors, it will never be permitted to escape you. I trust that your efforts in teaching, combined with those of your pupils in learning, the latter being indispensable, must result to the learners in three things—knowledge, power, and skill, in the order given. Thus you will never be led into fruitless discussion of absurd problems concerning the comparative value of knowledge and training, either for yourselves or for your pupils. You will never find yourselves speculating as to which your pupils could best spare from their mental equipment, their knowledge, or their power, for you well know that if they should spare either they would retain neither."

In his report to the board of trustees the principal recommended the abolition of the mid-year graduation, and the extension of the course to four years.

AT Wells College, Aurora, President Francis A. Walker, of the Massachusetts Institute of Technology, suggested that women's colleges should train pupils to become teachers. He believed that all women's colleges should be, in a high sense, normal schools. As there are probably 200,000 women teachers in the United States, a vast number of recruits is needed; probably 20,000 annually.

It appears that in Prussia, in many of the advanced schools, the number of Jewish pupils outnumbers the Christian scholars. One of the legislators proposed to grant the Jews schools of their own. Dr. von Gossler opposed this, pointing out that such a measure would be a step towards disruption, and said that members of all confessions were to work together for the welfare of the Fatherland. The separation of Jews and Christians would be the first step; the second would be the separation of Protestants and Catholics. Yet the motion was adopted by a large majority.

ALL those who have to deal with children should heed the words of a New York optician: "When children are growing up their sight is much impaired in dark city school-rooms, where they must strain their eyes looking at blackboard work at a distance. Besides this, too much cannot be said in condemnation of the practice of allowing children at night to study or read books that are badly printed. Daylight is God's light, and man cannot improve upon it. Night work, and especially reading, is very injurious for the sight and will wear a child's or man's eyes out quicker than anything else."

THE annual meeting of the West Virginia Educational Association, was held at Moundsville camp grounds, July 1, 2, and 3. Dr. Jerome Allen delivered a lecture on "A State System of Public Instruction."

ALL readers of THE JOURNAL should give heed to the advertisements. It will pay to spend a postal card on each thing that is advertised in it. When writing say, "I saw your advertisement in THE JOURNAL."

THE study of "Civics" is increasing. The book on this subject by Prof. Wm. M. Giffin, one of our most valued contributors, has been lately adopted by the boards of education of the city of Brooklyn, and the states of Washington and Delaware.

THE annual sessions of the New York State Teachers' Association and of the American Institute of Instruction were held this week at Saratoga. Full reports of these meetings will be published in next week's JOURNAL.



AN experiment in teaching "journalism" was made in Cornell University, but it has been given up. The best school for the journalist is practical and experimental work in a newspaper office. Just so; the place for a teacher to learn teaching is by teaching. We have a catalogue of a normal school where there is no training school!

#### NEW YORK CITY.

THE meeting of the board of education, July 3, was a very important one. Prest. J. Elward Simmons resigned his office, and Prof. J. L. N. Hunt was elected in his place. Besides Com. Simmons, it is believed that Comrs. Gallaway, Vermilye, and Devoe will also go out. The vacancy caused by the death of Com. Kuhne has been filled by the appointment of Mr. E. J. H. Tamsen. The election of assistant superintendents was then taken up, and Norman A. Calkins, Paul Hoffman, James Goodwin, and Geo. H. Davis, were re-elected. In place of William Jones, H. W. Jameson, vice prin. of G. S. 60, was chosen. The matter of establishing a school to train teachers in the methods of the new course of study was put off until the next meeting. It is something that the primary teachers particularly ask for. Mr. Holt proposed that they appoint two more assistant superintendents, and have the work of instruction done by them.

THE closing entertainment of the Workingman's School in West Fifty-fourth street were exceedingly interesting. A silver tea-set was presented by the parents of the scholars to Gabriel Bamberger, the principal, who has resigned, to assist in the establishment of a similar school in Chicago. The presentation was made by Otto Pullich and Felix Adler, who spoke in complimentary terms of Mr. Bamberger. The singing, recitations, etc., were such as to show the great skill reached in the teaching of this remarkable school.

THE other day a school was visited which had the reputation of being one of the "liveliest" and most interesting in the county; and sure enough, as soon as the visitors got inside the door they were struck with the appearance of busy enjoyment at every desk. Each boy had a pen and paper, and was writing away as if he expected to be paid for getting there first. One boy had an excited expression on his face, as if he was writing about a bear hunt; another showed a broad grin and was chuckling to himself—evidently he was writing something funny. They seemed to be so taken up with their work that they hardly paid any attention to the visitors, and this seemed the more remarkable because these two boys were the very ones who used to be notoriously fond of playing "hokey."

Pretty soon, as one by one they finished their compositions, they handed them in, and the visitors were surprised at the plain hand-writing, the clear expression and good English, the correct spelling and above all, the spirit that every one seemed to put into the work.

"How is it they do so well?" the visitors inquired.

"Practice makes perfect," replied the teacher. "They do a great deal of writing; it makes spellers, writers, grammarians, readers, and—best of all *thinkers*—of them."

"But how do you get them started? We thought composition writing was hated in school."

"It used to be but it isn't now; at least not in this school. We take TREASURE-TROVE!"

#### TREASURE-TROVE FOR JULY

Numbers among its timely and instructive illustrated articles accounts of "West Point," "Famous High Buildings," "Stanley's Last Expedition," "A Chinese Funeral," "The Founder of 'Vassar,'" experiments in "Home Electricity," and "The Art Spirit of To-day." Its useful, practical contents includes papers about "A Singing Mouse," "Mal-Aria," "Making Money," "Women as Inventors," and "Taking the Census." Its literary features are, "Chased by a Mountain Lion," "Andy Lane's Partner," "The Story of Neddu, and the Thirteenth White Goat," "The Impostor," and "The Fourth of July." Of course the Editor's Desk is one great center of attraction for both teachers and pupils; for there the pupils have an opportunity, not given by any other periodical in the world, to write; and to receive competent criticism on their stories.

That tired feeling disappears, and you feel active and strong after taking Hood's Sarsaparilla.

## BOOK DEPARTMENT.

#### NEW BOOKS.

ELEMENTS OF STRUCTURAL AND SYSTEMATIC BOTANY. For High Schools and Elementary College Courses. By Douglas Houghton Campbell, Ph. D. Boston: Ginn & Co. 253 pp. \$1.25.

The intention of the author in preparing this work was not to give an exhaustive treatment of the subject, for that could not be done in the space of a small volume, but it is planned to introduce the study of the science in high schools and serve as a beginning book in colleges. Many students get the idea that the chief aim of botany is to run down a plant by means of an analytical key. A knowledge of plants is of far more importance than ascertaining their names. To the lover of nature no science is more attractive than botany, and none affords more opportunities for study, for the objects are all around us. The aim in this book has been to select, as far as possible, those plants that are everywhere common. There is a profusion of illustrations, consisting mostly of drawings made expressly for this work, that will greatly aid in the study of plants. The introductory chapter lays out a plan of study somewhat different from that ordinarily followed. Then the structure of the cell is considered, after which the student's attention is directed to the low kingdoms such as the protophytes, algae, fungi, bryophyta, pteridophytes, spermatophytes, etc. A book at the best can only be a help to the study of a subject; the knowledge gained must be principally from natural objects. We think this text-book is an excellent guide for one who wishes to gain a knowledge of the elements of the science in the quickest and easiest way.

ALDEN'S MANIFOLD CYCLOPEDIA. Vol. 20, Infant-Joppa. New York: John B. Alden, publisher.

This publication has been growing in popularity from the time the first of these handy little volumes made its appearance to this, the twentieth one. We have found the information accurate and up to the times, and think that for those who want a cheap cyclopedia, with subjects treated with moderate fulness, this is the one for them to buy. With this volume comes a notice that the publication of the "Manifold Cyclopedia" has been transferred to Garretson, Cox & Co., 393 Pearl street, New York. Mr. Alden is associated with that firm in the editorial and business management of the cyclopedia, but continues his general publishing business as heretofore. A new library edition of the work will be issued. The earlier volumes have been carefully revised, and important additions made. Nearly 3,000 extra illustrations will be added to the new edition, the size of the volumes will be increased to about 800 pages each, and the number of volumes proportionately decreased from 40 to 32. The former edition will be continued to the close, so that present subscribers will have their volumes uniform. Popular as the volumes have been in the old form, the new form will certainly be much more popular.

#### REPORTS.

FORTY-EIGHTH ANNUAL REPORT OF THE BOARD OF EDUCATION OF THE CITY OF NEW YORK FOR THE YEAR ENDING DECEMBER 31, 1899. Hon. John Jasper, superintendent.

Some very instructive facts and figures are contained in this book. Especially so are those in regard to accommodations and attendance. In spite of the fact that the city is growing rapidly, the average attendance was only 153,441 in 1899, 318 less than the year before. The decrease of attendance is the first that has occurred since 1871, and was caused by compliance with the action of the board calling for the most stringent enforcement of the regulations governing the seating capacity of rooms and the size of classes. Many pupils were thus thrown out of school, and the way for the younger pupils barred. Considerable was done in the way of providing more school-room, but, as a daily paper pertinently remarks, we do not want costly school-houses so much as we want more of them. No child in this city should be kept out of school for lack of room.

The population is steadily moving up town. The attendance of pupils north of Fortieth street is forty-seven per cent. of the total attendance, and the attendance south of Fourteenth street thirty-nine per cent. It was found that the manual training course was adapted for general introduction, except in the following particulars: the omission of clay-modeling, shop-work, and cooking was recommended; the sewing in the female grammar schools was recommended to be optional instead of compulsory. Manual training has proved very successful, not only in its spread in the schools, but in the satisfactory manner in which it has been carried on. In the several classes of schools the number of foreign pupils studying the English language formed, as usual, a large part of the total number of pupils.

#### ANNOUNCEMENTS.

LEE & SHEPARD issue "Brushes and Chisels," an Italian story of art and love, of more than ordinary merit and interest.

HOUGHTON, MIFFLIN & Co.'s new publication, "The Master of the Magicians," an historical story, will be welcomed by the many admirers of the writings of the author, Elizabeth Stuart Phelps. Another very welcome volume is the "Life of Bryant" in the "American Men of Letters" series, edited by Charles Dudley Warner.

HARPER & BROTHERS introduce a novelty, "Maria," a South American romance, translated by Rolio Ogden. It is a picture of home life, and accurately describes Colombian scenery, with which very few Americans are acquainted.

D. APPLETON & Co.'s recent publication, a musical story, entitled, "The Dominant Seventh," by Kate Elizabeth Clark, is a dainty bit of fiction through which runs the "dominant seventh" of the Rubenstein sonata.

D. LOTHROP Co.'s book, "The Fairhaven Fourteen," written by Marianna Tallman, tells in an interesting and sprightly way about the success of two classes in the Fairhaven Sunday-school—boys and girls—who formed a society, whose objects were "to teach them to be good, and do kind things for other people, and to try to help the church and Sunday-school along."

THOMAS Y. CROWELL & Co. have in preparation new library editions of Dickens', Scott's, and Thackeray's works, to be printed from large-face type made expressly for this series.

SCRIBNER'S "Yellow Paper Covered" series of novels, will have two editions this month: "With the Best Intentions," by Marion Harland, and Dr. E. E. Hale's "Philip Nolan's Friends."

THE PUTNAMs will publish three books, among others, in July: "The Story of the Jews under Rome," by the Rev. W. Douglas Morrison; the first volume of the limited edition of the "Writings and Correspondence of John Jay;" and "Among the Moths and Butterflies," a revised and enlarged edition of "Insect Lives or Born in Prison," by Julia P. Ballard.

SCRIBNER & WELFORD announce that the next volume in the "Contemporary Science" series will be "Sanity and Insanity," illustrated by Charles Mercier; and following that will come "Hypnotism," by Dr. Albert Moll.

A. C. ARMSTRONG & SONS' publication, "Newspaper Reporting," will be of interest to the American newspaper fraternity. It gives an account of the English reporter and his work.

A. D. F. RANDOLPH & Co. offer, in "Leah of Jerusalem," a story of the time of Paul, by Edward Payson Berry.

THE CASSELL PUBLISHING CO. will issue in the fall a book, by Ward McAllister, on "Society as I have found it."

JOHN W. LOVELL & Co. will publish, under the title of "Lux Mundi," the collection of theological essays that made such a sensation in England.

GINN & Co. recently issued a revised edition of "Hand-book of Latin Writing," by Preble and Parker. The revision extends to almost every page, and includes the results of five years' experience with the book, and of the growth of composition study at Harvard.

#### LITERARY NOTES.

An almost line for line translation of Goldsmith's "Deserted Village" has been made into the tongue of the Hindu race. It preserves nearly the ideas of the original.

A life of Mr. A. M. Mackay, the missionary whom Mr. Stanley met at Uganda, in Central Africa, and who died a few weeks later, has been written by his sister, Mrs. Harrison, and will soon be published. Mr. Mackay has been called "the St. Paul of Uganda."

Dr. Nansen's account of his tour across Greenland will be published in the autumn by Longmans, Green & Co. It will be fully illustrated.

"Protoplasm and Life," two biographical essays by Charles F. Cox (N. D. C. Hodges), lead interestingly to the conclusion that the missing link has not yet been discovered.

"The Master of the Magicians" is pronounced by the *New York Independent* "one of the most powerful and admirable historical romances ever written by American hands."

#### MAGAZINES.

The *Magazine of American History* in its July number has a fine frontispiece portrait of Sir William Blackstone. In the leading article, "The Golden Age of Colonial New York," a vivid picture is drawn of the chief city of the continent as it then appeared. Other articles are: "Sir William Blackstone and His Work," "The Indian College at Cambridge," "Burgoyne's Defeat and Surrender, an Inquiry from an English Standpoint," and "President Lincoln's Humor."

Among the leading articles in *Babyhood* for July are: "Fruit for Children," "The Kindergarten on the Farm," and "The Baby's Mind."

"Harvard University and Reform," by Chancellor Harkins, is an article in the *July National Magazine* that will be widely read by educators. Many thoughtful readers will be interested in the "Plan Proposed for a Polytechnic Institute." The article on "Chicago Trade Schools" shows what that city is doing for her young men.

*St. Nicholas* for July is as bright as ever. Especially striking is the frontispiece, "The Baby a Prisoner of War," an illustration of the charming story of the same title with which the magazine opens. Of course most boys want to learn "Cycling." A finely illustrated article on that subject gives full directions. The article on base-ball is about the duties of basemen and the shortstop. "How to Sail a Boat" tells how one can learn to enjoy this healthful recreation. Not the least of the attractions of the number is the lively account of "Six Years in the Wilds of Central Africa." "Hawks and Their Uses" is an article that is very appropriate to the season.

The Fourth of July number of *The Youth's Companion* comes to us in a flaming red cover, like the outside wrapper of a firecracker. The contents makes good this promise of the exterior, for the title page has an illustrated poem, "Raising the School-House Flag." Other articles are: "A Little Hero of Lundy's Lane," "A Fourth of July Cow," "He kept his Flag up," and "The Fourth of July under Difficulties." It is gratifying to find this and other excellent papers taking so much pains to encourage patriotic sentiment.

The *June Sanitarian* contains an abstract of President Moore's address before the American Medical Association at Nashville, May 20, 1899. It is a review of national sanitary laws in the United States, and their operation. In "Immigration and its Dangers," the subject is considered from a sanitary standpoint.

The *Fortnightly Review* for July contains, in addition to the usual variety of articles, one by Madame James Darmesteter on "The Bookmen of Paris of the Fourteenth Century."

The *July North American Review* contains Mr. Balfour's rebuttal of Mr. Parnell's criticism of the measure of Irish land reform. The tariff discussion which has been participated in by Messrs. Gladstone, Blaine, Mills, McKinley, Breckinridge, and others, is summed up in this number by Andrew Carnegie. Speaker Reed writes on "Contested Elections," and a prominent Republican writing under a *nom de plume*, says of Mr. Reed's decision in the House: "I venture the opinion that the ultimate and impartial judgment, both parliamentary and popular, will be that, while the speaker's design is praiseworthy, his method of carrying it into effect not only reverses all the safe precedents of the House, but violates both the spirit and the letter of the constitution of the United States."



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## THE PUBLISHERS' DESK.

Those who know a good thing when they see it—particularly teachers who have had practical experience with school text-books—will take a lively interest in the brief list of common school text-books published by the American Book Company. Their reading and spelling books include Appletons', Barnes's, Harpers', Harrington's, Harvey's, McGuffey's, Swinton's, and Watson's readers and spellers. Their arithmetic books include Appletons' Standard Arithmetics, Davies's Arithmetics, Fish's, French's, Harpers', and Howard's arithmetics. Their drawing books are Barnes's, Bartholomew's, Eclectic Industrial, Krusi's, and White's. Their language lessons are Barnes's, Kerl's, Long's, Maxwell's, Metcalf & Bright's, Stickney's, Swinton's, and others. Their grammar list has Clark's, Conklin's, Harvey's, Holbrook's, Lyte's, Quackenbush's, Swinton's, and others. Penmanship is represented by Appletons' Standard Writing Books, Barnes's New Penmanship, Eclectic Penmanship, Eclectic German Copy Books, Harpers' Copy Books, Payson, Dunton & Scribner's Series, and others; geography, by Appletons', Barnes's, Cornell's, Guyot's Geographies, Harpers', Monteth's, Swinton's, and others. The history of the United States is shown in Barnes's School Histories, Eggleston's, Quackenbush's, and Scott's histories. Physiology includes Dalton's, Huxley and Youmans' Elements, Johnnot's and Bouton's How We Live, Steele's, Appletons', and Union Temperance Series.

#### New Saturday Afternoon Express New York to Long Branch and Point Pleasant via Pennsylvania Railroad.

Commencing on Saturday, June 28th, a new fast train will be run from New York to Point Pleasant on Saturdays only. This train is placed in service for the convenience of those desiring a half holiday on the coast, and will leave New York at 1.30 P. M., arrive at Long Branch 2.50 P. M., and Point Pleasant 3.30 P. M. The inauguration of this service affords an opportunity of visiting these popular resorts never before enjoyed.

Few publications for teachers have given more universal satisfaction and delight than "Helps for Ungraded Schools," published by Messrs. Milton Bradley Co., Springfield, Mass. It is a manual for the use of educational material, and is bound to interest you, whatever your grade. At least four departments of instruction are being carried on simultaneously in the lowest grades of our best primary schools—language work, form study, the teaching of color, and number work. Each of them should be given an important place

in the ungraded school, and for this reason they are defined and explained in detail in the pages of this book.

#### The Heart of the Alleghanies.

Writing of a recent trip across the mountains of West Virginia a gifted journalist says:

"Twilight on the grade is grand. The mountain summits look like the bushy tops of trees. The sun has disappeared in a ball of fire at his 'jumping-off place,' but the vivid lighting of the western sky by the still upturned illumining face below the horizon is in marked contrast to the gathering shades behind the rushing train. From shelf to shelf, from crag to crag, from brink to brink, we almost fly. Like a flashing transformation, rendering almost past belief the fact that the scene is in the midst of the Alleghanies, comes a bit of landscape gardening with all the beauties of walks and hedges and bright hued flowers, a mountain brooklet tumbling through the center—Buckhorn Wall, the most noted and most admired view that can be had from any known point in the Alleghany range. To enable the road to span the tremendous gorges, a massive wall of cut stone was erected for a distance of several hundred feet, and more than a hundred feet above the foundation rock. As the river makes an abrupt turn at right angles, a deep canyon is opened up for miles. Range after range of mountains disappear behind each other. The shadowy outlines of single peaks steal out through the haze."

This beautiful scene is on the Baltimore and Ohio R. R. near Grafton, W. Va. The entire line from the Potomac to the Ohio is a majestic panorama of the grandest views on the continent and all endowed with historic interest.

Messrs. Leach, Shewell & Sanborn, publishers, 34 Harrison Ave., Extension, Boston, and 16 Astor Place, New York, have long borne an enviable reputation for issuing the best books only; so that any volume carrying this firm's imprint shows a guarantee of merit on its title page. Among other excellent books, they publish Greenleaf's New Inductive Arithmetics, Wells' Algebras, Geometry, Trigonometry, Our Language, and Elements of Composition and Grammar, by Southworth & Goddard, Cleveland's First and Second Primary Readers, Our Republic: A Civil Government of the United States, Morgan's English and American Literature, Students' Series of English Classics, and Brand's Physiologies.

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The Interlinear Classics of Messrs. Chas. DeSilver & Sons, No. (G) 1102 Walnut street, Philadelphia, are a great help to scholars, who recall the saying of Milton that, "We do amiss to spend seven or eight years merely scraping together so much miserable Latin and Greek as might be learned otherwise easily and delightfully in one year." The classics includes Virgil, Caesar, Horace, Cicero, Sallust, Ovid, Juvenal, Livy, Homer's Iliad, Gospel of St. John, and Xenophon's Anabasis. This house also publishes Clark's Practical and Progressive Latin Grammar; Sargent and Frost's Speaker, Pinnock's and Lord's School Histories, Manesca's French Series, etc.

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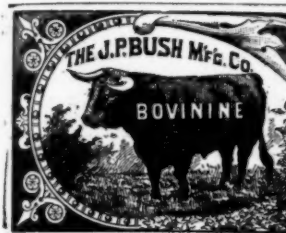
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There is a man-eating tiger abroad now in the Central Provinces, says the Allahabad Pioneer, which had the temerity to attack the chief commissioner's advance camp and carry off a cook. This animal is still killing at the rate of about two persons a week, and a reward of 200 rupees is on its head. Not far off a man-eating tigress has just been shot over a human "kill" at the foot of the Satpura hills in the Balaghat district. Both those animals are believed to have been converted into man-eaters by bullet wounds from the native matchlock—fresh instances of the mischief that is done by the present system of rewards. A reward of fifty rupees is enough to induce any villager to try his luck at a pot shot, with the frequent result of converting a comparatively harmless animal into a scourge of the country side. Whereas, if the reward were removed the shooting would be left to the professional hunters, who would still find abundant inducement in the value of the skins, and the fees they would get from the villagers in cases where a tiger had become troublesome by his attacks upon cattle.

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A thrilling story of an encounter with a leopard comes from Seraigunge, in India. Two young English gentlemen belonging to the locality went out to hunt a leopard that had been making its presence unpleasantly felt in the neighboring villages. Neither was accustomed to hunting or to the use of firearms, but both were full of pluck and eager to show their prowess. They took up their station on a patch of cleared ground, awaiting the leopard that the beaters were chasing from his lair, when suddenly the brute leaped on one of them and caught him by the thigh, inflicting terrible injuries. His companion, seeing his danger, tried to fire at the brute, but unfortunately the safety pin, with the use of which he was unacquainted, had locked the gun, so that the trigger would not move. He tried to beat the leopard off from his companion, but the enraged beast turned upon him, stripping his arm and literally crunching his hand. Two of the beaters came up and used their bamboos with such effect that the animal turned tail and returned to the jungle. One of the men died of his injuries.

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